



UNIVERSITY
OF
JOHANNESBURG

COPYRIGHT AND CITATION CONSIDERATIONS FOR THIS THESIS/ DISSERTATION



- Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- NonCommercial — You may not use the material for commercial purposes.
- ShareAlike — If you remix, transform, or build upon the material, you must distribute your contributions under the same license as the original.

How to cite this thesis

Surname, Initial(s). (2012). Title of the thesis or dissertation (Doctoral Thesis / Master's Dissertation). Johannesburg: University of Johannesburg. Available from:
<http://hdl.handle.net/102000/0002> (Accessed: 22 August 2017).

**A RESEARCH REPORT IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER IN SUSTAINABLE URBAN PLANNING AND
DEVELOPMENT**

IN

THE FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

DEPARTMENT OF TOWN AND REGIONAL PLANNING

Title:

*The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive
Communities: A Study of the City of Johannesburg, South Africa*

Name: Vutivi Kay Baloyi

Registration Number: 217073098

We accept this report as conforming
to the required standard

SUPERVISOR: G. Onatu.....

EXTERNAL EXAMINER:

THE UNIVERSITY OF JOHANNESBURG

DATE: 30 JANUARY 2020

In presenting this report in fulfilment of the requirements for a degree at the University of Johannesburg. I agree that permission of extensive copying of this report for scholarly purposes may be granted by the head of my department or by his or her representatives. It is understood that copying or publication of this report or financial gain shall not be allowed without my permission.

Department of Town and Regional Planning
The University of Johannesburg DFC Campus
55 Beit Street
Doornfontein
Johannesburg, South Africa

Date: 16/01/2020

Signature:



.....

ABSTRACT

In the past decades, since the dawn of democracy South Africa has been trying to address the social, spatial, political, and economic challenges that exist as a result of Apartheid. These have had far reaching consequences in society that 25 years later after apartheid, the country finds itself with alarming rates of poverty and inequality despite efforts. Poverty and inequality have a proportional relationship to access to socio-economic services. Lack of access to these services perpetuates exclusivity and thus inequality and poverty.

The purpose of this study was to investigate the role of low-middle income housing in creating socially and economically inclusive communities. This was to understand the underlying challenges and opportunities in transforming South African communities and to understand and plan for better and more socially and economically inclusive communities through housing development. The research looks specifically at the principles of an inclusive community as stipulated in Sustainable Development Goals (SDGs).

With the use of the City of Johannesburg as a case study and Fleurhof, Cosmo City, South Hills and Casa Mia as key study areas, the research looked at whether the principle of effective participation, sharing in development opportunities and protection of the poor are being achieved in low-middle income housing developments. With the use of diverse methods, the researcher unpacked the perspective of experts and residents with regards to the aforementioned and make recommendations on how inclusive development can be achieved in Johannesburg and further outlines the implications for future research – this study was limited in scope and can be expanded to investigate broader and more complex urban and community development concepts such as the role of nodal development or regional development in creating inclusive communities.

The researcher found that Private Public Partnerships and effective participation are great vehicles to achieve inclusivity. The research further exposed how low-middle income housing improves access to social and economic services, enables the provision of quality services cost effectively in low-middle income communities. Basic services provision goes a long way in alleviating poverty and inequality. So, the role of housing in creating inclusive communities begins with acknowledging that people need access to quality basic services, and they need to be part of the development of their communities.

Keywords: *inclusive communities, low-middle income housing, poverty and inequality, socio-economic opportunities, and Effective participation.*

ACKNOWLEDGEMENTS

I am grateful for God, my supervisor Mr George Onatu and Lecturers Mr Aurobindo Ogra and Walter Musakwa, my dad Enock Baloyi and sister and Rirhandzu Baloyi and also my employer Mr Marthinus Brits and the rest of the team; all for giving me the strength, opportunity and support I so needed to be part of and to complete this project.

INKOMU



TABLE OF CONTENTS

ABSTRACT.....	II
ACKNOWLEDGEMENTS.....	III
DEFINITIONS.....	VII
ABBREVIATIONS.....	IX
TABLES.....	X
FIGURES.....	X
CHAPTER 1: INTRODUCTION AND BACKGROUND.....	1
1.1 GENERAL BACKGROUND OF THE STUDY.....	1
1.2 RESEARCH STATEMENT AND QUESTIONS.....	2
1.3 AIM OF THE STUDY.....	3
1.4 OBJECTIVES OF THE STUDY.....	4
1.5 CASE STUDY: CITY OF JOHANNESBURG.....	4
1.5.1 The Fleurhof Development (Region C).....	6
1.5.2 Cosmo City social housing development (Region C).....	7
1.5.3 South Hills (Turffontein – Region D).....	8
1.5.4 Inner City Development (Casa Mia - 37 Soper Street, Berea. – Region F).....	9
1.6 RESEARCH METHODOLOGY.....	10
1.7 LIMITATION OF THE STUDY.....	11
1.8 SIGNIFICANCE OF THE STUDY.....	11
1.9 STRUCTURE OF RESEARCH.....	11
CHAPTER 2: LITERATURE REVIEW.....	13
2.1 INTRODUCTION.....	13
2.2 DESCRIBING THE HOUSING CONUNDRUM.....	13
2.3 POLICY ON HOUSING AND INCLUSIVE DEVELOPMENT.....	15
2.3.1 The White Paper on Housing of 1994 and RDP.....	16
2.3.2 Constitution of the RSA 1996 & National Housing Act of 1997.....	16
2.3.3 National Housing Code 2000 & 2009.....	17
2.3.4 Breaking New Ground, 2004.....	17
2.3.5 NDP 2030 & LED Framework 2018.....	18
2.1.6 City of Johannesburg Policies.....	18
2.4 KEY CHALLENGES IN ACHIEVING INCLUSIVE AND SUSTAINABLE COMMUNITIES.....	20
2.5 INCLUSIVE GROWTH/DEVELOPMENT, POVERTY AND INEQUALITY IN AFRICAN COUNTRIES/CITIES.....	21
2.6 INCLUSIVE HOUSING DEVELOPMENT: INTERNATIONAL PRACTICES.....	23
2.6.1 Germany: Co-housing.....	23

2.6.2 Australia: Private sales of affordable housing.....	24
2.6.3 United States of America: Inclusionary Housing Policy	24
2.7 CONCLUSION.....	26
CHAPTER 3: RESEARCH METHODOLOGY	27
3.1 METHODOLOGY	27
3.2 STUDY DESIGN	27
3.3 SAMPLING	29
3.4 DATA COLLECTION STRATEGIES.....	31
3.4.1 Interviews.....	31
3.4.2 Delphi process - Questionnaires.....	32
3.4.3 Documents and observation.....	36
3.5 DATA ANALYSIS STRATEGIES	38
3.6 DATA MANAGEMENT STRATEGY	39
3.7 ETHICAL CONSIDERATIONS.....	39
3.8 STRENGTHS AND LIMITATIONS OF THE STUDY.....	40
3.9 STUDY MANAGEMENT	41
3.9.1 Methods of achieving validity.....	41
3.9.2 Study timelines.....	42
CHAPTER 4: DATA ANALYSIS AND FINDINGS	43
4.1 INTRODUCTION	43
4.2 FIRST ROUND QUESTIONNAIRE.....	43
4.2.1 Question 1: Role of Policy in the development of human settlements.....	43
4.2.2 Question 2: Post 1994 Policies that addresses poverty, inequality & socioeconomic exclusion.....	44
4.2.3 Question 3: Public Private Partnerships	44
4.2.4 Question 4: Housing & Spatial Transformation.....	45
4.2.5 Question 5: Characteristics of an Inclusive Community	45
4.3 SECOND ROUND QUESTIONNAIRE	46
4.3.1 Question 1 & 2: What kind of communities are being currently developed and where, as it relates to housing development?.....	49
4.3.2 Question 3: What are the socio-economic opportunities that comes with low-middle income housing development?	50
4.3.3 Question 4 & 5: What is the current normative framework (norms and principles) in housing and community development?.....	51
4.3.4 Question 6,7 & 8: Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?	52

4.3.5	Question 9 & 10: What is the impact of the current participation procedure in housing policy and development?	54
4.4	INTERVIEWS	55
4.4.1	Opportunities	55
4.5.2	Effective Participation	56
4.5	DOCUMENTS	56
4.6	OBSERVATIONS AND SPATIAL ANALYSIS: COMMUNITY DEVELOPMENT, LOCATION AND SOCIO-ECONOMIC OPPORTUNITIES	59
4.6.1	Fleurhof development	59
4.6.2	Cosmo City development	61
4.6.3	South Hills development	62
4.7	CONCLUSION	63
	CHAPTER 5: DISCUSSION, CONCLUSION & RECOMMENDATIONS	64
5.1	INTRODUCTION	64
2.7.1	Research questions, aim and objectives of the study	64
2.7.2	Methods and approach	64
5.2	DISCUSSION OF FINDINGS	65
5.2.1	Housing and community development	65
5.2.2	Socio-economic opportunities of low-middle income housing	66
5.2.3	Housing and community development normative framework	67
5.2.4	Strategies in addressing poverty and inequality	68
5.2.5	Effective participation	70
5.3	CONCLUSIONS	71
5.4	IMPLICATIONS FOR PRACTICE IN ACHIEVING INCLUSIVE COMMUNITIES IN JOHANNESBURG	72
5.5	RECOMMENDATIONS FOR FUTURE RESEARCH	73
	BIBLIOGRAPHY	74
	ANNEXURES	85
	ANNEXURE 1: LOCALITY PLAN	86
	ANNEXURE 2: FLEURHOF LAYOUT PLAN	87
	ANNEXURE 3: COSMO CITY LAYOUT PLAN	88
	ANNEXURE 4: SOUTH HILLS LAYOUT PLAN	89
	ANNEXURE 6: SURVEY MONKEY QUESTIONNAIRE	90
	ANNEXURE 5: RESIDENT QUESTIONNAIRE	91
	ANNEXURE 7: SPATIAL ANALYSIS MAPS	93

DEFINITIONS

Low-middle income group - as per the Johannesburg Inclusionary Housing Policy, 2019 of people earning R7000 and less.

Low cost housing – refers to BNG housing, Social housing, and FLISP/GAP housing.

Sustainable development – is a development process that caters for both the present and future development aspirations and is guided by values and principles that forms part of the decision-making process.

Inclusive development - is about accountability for the disadvantaged and vulnerable in society, about shared resources and opportunities and actively participation in society.

Effective participating - is when all stakeholders meaningfully engage in participation and are satisfied with their level of involvement.

BNG housing – fully subsidised housing (see social housing) developed through the BNG housing policy.

Social housing – A rental or cooperative housing option for low to medium income households (R3500 – R7500 per month) requiring institutionalized management and being provided in designated areas by authorized social housing institutions or projects.

Flisp/Gap housing - A housing finance subsidy for first time home buyers, it is aimed at the “gap market”; people whose income doesn’t qualify them for a Government housing subsidy and also isn’t enough to qualify for a home loan. (income range from R3 501 and R15 000 per month).

Affordable Housing – A dwelling house or unit where taxes, insurances and utility cost are less than 30% of the gross household income (Definition from Spatial development framework, 2016).

Inclusionary Housing – refers to a housing development programme where the private sector (developers) are required to allocate a predetermined percentage of their new housing developments low- and middle-income groups at an affordable rate.

Social amenities/services/Infrastructure – also known as soft services these are asserts that provide the accommodation of social services, this is inclusive of clinics, hospitals, schools, libraries, and general public facilities.

Economic amenities/services/Infrastructure – also known as hard services these are asserts that provide support to economic activities, this is inclusive of Transportation infrastructure.

Positive consensus - is when +60% agree and strongly agree and

Negative censuses - is when +60% disagree and strongly disagree.



ABBREVIATIONS

BNG	- Breaking New Ground 2004
CIBD	- Construction Industry Development Board
CoJ	– City of Johannesburg / the City
FLISP	- Finance Linked Individual Subsidy Programme
JOSHCO	- Johannesburg Social Housing Company Pty Limited
LED	- Local Development Framework
MTSF	- Medium Term Strategic Framework
NDP	- National Development Plan
PPPs	- Public Private Partnerships
RDP	- Reconstruction and Development Programme
RSA	- Republic of South Africa / South Africa
RSDF	- Regional Spatial Development Framework 2010/11
SDF	- Spatial Development Framework
SDG	– Sustainable Development Goals
SMME	- Small Medium Enterprises
SPLUMA	- Spatial Planning and Land Use Management Act of 2013
TOD	- Transportation Oriented Development

TABLES

Table 1: Expect Panel.....	34
Table 2: Likert scale.....	35
Table 3: Summary of data collection methods.....	37
Table 4: Study timeframe.....	42
Table 5: Summary of round 2 responses.....	48
Table 6: Normative framework (development principles).....	58

FIGURES

Figure 1: Fleurhof study area.....	7
Figure 2: Cosmo City Housing Types	8
Figure 3: South Hills Study Area.....	9
Figure 4: Casa Mia Building.....	10
Figure 5: Rich door/ Poor door.....	25
Figure 6: Housing PPP structure	45
Figure 7: Question 1 response graph - Community development.....	49
Figure 8: Question 3 response graph - Normative framework	52
Figure 9: Question 4 response graph - poverty & inequality	53
Figure 10: Question 5 responses - Effective participation.....	54
Figure 11: Fleurhof and Surrounding Area.....	60
Figure 12: Cosmo City and surrounding	61
Figure 13: South Hills and surrounding area.....	62

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 General Background of the study

In the last two decades the Republic of South Africa (RSA/SA) has been trying to address the social, spatial, political, and economic challenges that exist as a result of Apartheid (Karriem & Hoskins, 2016). These have had far reaching consequences in society that 25 years later after apartheid, the country finds itself with alarming rates of poverty and inequality despite efforts. Poverty and inequality have a proportional relationship to access to socio-economic services. Lack of access to these services perpetuates exclusivity and thus inequality and poverty (Barros & Gupta, 2017).

On a report by Statistics South Africa dated March 2018 South Africa is the one of the highly unequal countries in the world with a very high unequal access to opportunities. This is entrenched strongly on the location of those at the bottom of the food chain, the poor, the working class, the vulnerable (World Bank, 2018). "Access to quality basic services, such as education, health care, and essential infrastructure (such as adequate housing), provides a better understanding of the nature and causes of inequality of outcomes" (World Bank, 2018, p. 45). Poverty and inequality are thus the main drivers of exclusivity in the social and economic spaces where people negotiate their daily survival.

Housing is an essential socio-economic aspect of development (Henilane, 2016) and according to the Sustainable Development Goals (SDGs) it is one of the basic human needs and imperative to sustainable development (Willis, 2016). Despite the understanding of the importance of housing in developing sustainable communities (Musvoto & Mooya, 2016); there is still a lack of understanding on the role of housing in creating inclusive communities (Henilane, 2016).

Housing has verifying consequences on human well-being, economic progress, and social stability. Thus, making it important to expand quality housing supply to better the living standards of millions of people (Morange, 2002). Decent housing provides protection, privacy and self-respect (dignity), a place for personal development, an assert, and space for leisure activities and social interaction (Marais & Ntema, 2013). By implication housing is both economic and social in its nature and it is a big constituent of community development (Turok & Borel-Saladin, 2016).

Evidence shows how the patterns in housing development, more specifically low-cost housing development in South Africa has been disconnected to the needs of people (Marais & Ntema, 2013); instead of empowering new home owners, it has burdened them. These issues are created firstly by the lack of understanding in what a house and housing is and can potentially be, its supporting elements and the linkage between space and uses; and also how they interact to create a thriving community (Sliuzas, 2003).

In the literature, the relationship between housing and inclusivity in community development is mostly overlooked. These concepts are mostly studied separately as two non-contesting phenomena's/concepts, that are mutually exclusive. But one has the potential to address the challenges that comes with lack of the other. Inequality can be addressed through the development of housing in areas of opportunity for people who would otherwise never realise quality education or good health care) Thus, there is an urgent need to unpack this relationship more specifically the role of low-middle (quality and affordable) income housing that is developed through PPPs in creating socially and economically inclusive communities as per Goal 11 of the SDGs. A renewed understanding can reshape how people negotiate their living and restructure South African communities.

The main objective of this section is to give a brief background and description of the study and the study area and why the study is important or significant in both the body of knowledge and in practice.

1.2 Research statement and questions

Literature stipulates that housing is an instrument that can be used in developing sustainable human settlements and has the potential to encouraged spatial restructuring. With given attention to the need for well-located mixed-use and mixed-income housing projects that are championed by both the public and the private sector such communities can be realised (Newton & Schuermans, 2013). There needs to be an intervention to encourage more diverse forms of housing through well-structured housing programmes, paying more attention to social and affordable rental housing options. This might also mean that local government must be given the mandate for housing delivery as they are directly linked to the private sector; this will encourage integrated settlements that are linked to the social aspects of development such as job and socio-economic opportunities to name a few. The following research statement was formulated against this background:

“The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of the City of Johannesburg, South Africa”

Given the background and the research statement the research seeks to answer the following questions looking specifically at the process and product of housing development that were developed through the influence of the Breaking New Ground (BNG) Policy of 2009 strategy:

1. What kind of communities are currently being developed and where, as it relates to housing development?
2. What are the socio-economic opportunities that comes with low-middle income housing development?
3. What is the current normative framework (norms, standards, and principles) in housing and community development?
4. Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?
5. What is the impact of the current participation procedure in housing policy and development?

These will be measured against the three principles of social and economic inclusive development of the sharing of development opportunities, effective participation, and involvement in the politics of development and Protection of the poor. Effective participation is when all stakeholders meaningfully engage in participation and are satisfied with their level of involvement. This research basically focuses on these principles (Gupta & Vegelin, 2015). These questions speak to 5 aspects of housing development: the status quo, socioeconomic opportunities, the normative framework, development agenda and the impact of the stakeholder participation process?

1.3 Aim of the study

The aim of the study is to investigate the role of low-middle income housing in creating socially and economically inclusive communities. This is to understand the underlying challenges and opportunities in transforming South African communities and to understand and plan for better and more socially and economically inclusive communities through PPPs low-middle income housing developments.

1.4 Objectives of the study

The study has four main objectives, and they are centred around the three principles of social and economic inclusivity and how housing development is interconnected with social and economic development in ensuring inclusive communities, more especially in developing countries. These objectives are:

- To determine the development challenges and opportunities in low-middle income housing development in creating inclusive communities.
- To determine if and how the inclusion of people in the politics of low-middle income housing development contribute towards inclusive communities.
- To evaluate the importance of low-middle income housing in the protection of the poor.
- To determine the key aspects the current development normative framework to improve the relationship between low-middle income housing development and the development of inclusive communities.

1.5 Case Study: City of Johannesburg

The case study is The City of Johannesburg which is home to approximately 5.05 million People, and it is estimated that by 2021 the population will be approximately 5.5 million. 21.5% of households in the City reside in informal dwellings (City of Johannesburg, 2018), this is equivalent to approximately 300 000 in housing backlog (Democratic Alliance , 2019). It has become very difficult for the City to meet this demand as it is growing at an annual rate of 1.18%, this explains the growing number of informal settlements which are now at 180 despite efforts in eradicating them (City of Johannesburg, 2018).

The housing challenges are also perpetuated by the historic spatial pattern of the city. The spatial inequality defines the settlements pattern of the city, where people are dislocated from economic and social opportunities (Onatu, 2010). This contributes significantly to the inequalities in the city as a significant number of the residents' struggle to access socio-economic opportunities with ease (City of Johannesburg , 2019).

The housing backlog is constituted by the following factors in addition to spatial inequality according to the City's IDP report (City of Johannesburg, 2018): Immigration to the city, which is estimated at 3000 people per month; Informal settlements, which are growing due

to immigration; housing waiting list, totally unreliable; homelessness; unregulated backyard rentals; and overcrowding in public hostels.

The city has in the past years and still is pooling resources to address the housing challenges it is faced with. It has partnered with the private sector to deliver low cost affordable quality housing. This has resulted in the development of several social housing, mixed income housing opportunities, inner city revitalisation/refurbishment and rental accommodation. However, the City only delivers 1% of the demanded housing per year (City of Johannesburg, 2018), this is less than the rate at which the housing backlog is grows annually.

Despite this, Johannesburg is home to nationally recognised social and affordable housing projects and infill integrated housing projects. The selected study areas are affordable housing developments by the City of Johannesburg, which are developed and managed by the Johannesburg Social Housing Company (JOSHCO) and some of its partners and private investors.

JOSHCO is responsible for developing and investment in building refurbishments, social rental housing, upgrading and management of Council owned rental housing stock, hostels and conversion of Inner-City buildings into social housing units and developing strategies, more especially in declining nodal areas (Knopjes, 2015). Their objectives are to increase stock through refurbishment and conversion and to develop social housing projects within the transport nodes with principles centred around sustainability (Joshco, 2019).

The following housing projects were selected from 3 Regions of the 7 in the City:

- The Fleurhof Development Ext 2-30 (Roodepoort phase 2 – Region C).
- Cosmo City social housing development (Region C).
- South Hills social housing development (Turffontein– Region D); and
- Inner City Development (Casa Mia - 37 Soper Street, Berea – Region F).

These are infill, greenfield and revitalisation projects, the first two were and are being developed in phases, with some phases completed in the last ± 10 years and some being projected to be completed in the next few years. Casa Mia is a revitalisation project, while Fleurhof is an infill development, South Hills and Cosmo city are greenfield developments. Together the four developments yield a total of not less than 17 723 low cost housing (this is BNG housing, Social housing, and Flisp/Gap housing).

1.5.1 The Fleurhof Development (Region C)

The Fleurhof Development measures 440 hectares in extent of privately-owned land located on the south west of Johannesburg and was developed by Calgro M3 as an integrated residential project, in partnership with the City of Johannesburg Metropolitan Municipality (here and after referred to as the City) for a total of 15 411 dwelling units as of 2015 and it accommodates a total of 83 000 people (Khan, 2014).

It is one of the biggest integrated housing developments in the province of Gauteng and one of the 2015 Premier's Mega Projects. The entire development is composed of different types of dwelling units and tenures. The development has specific economic target markets for all tenure types: fully subsidized BNG housing, GAP housing (Social, FLISP & open market rental) and Bonded housing (open market).

The development has a mix-use development element which are inclusive of approximately 3 236 BNG housing units, 1 334 Social Housing units, 3 719 FLISP/GAP and rental housing units and 2 122 free standing open market bonded units, 11 business and retail opportunities, 30 parks, 5 schools, 5 religious' sites, 7 creches and 1 community centre. The City of Johannesburg has used this development as a catalyst to drive infrastructure development in the area and surrounding to unlock future development along Main Reef Road in Roodepoort. It has also provided the opportunity to connect the affluent areas of Roodepoort and the previously disadvantaged areas of Soweto (Calgro m3 Group, 2016).

The surrounding area is characterised by a diversity of uses, social and economic activities and because of the magnitude of the development it has a massive social and economic impact on neighbouring neighbourhoods and economic and industrial nodes. It is important to keep in mind that this area mushroomed as an informal settlement due to the industrial activity in the surrounding areas (Sibanda, 2017). Given this, it is best suited for the proposed study.



Figure 1: Fleurhof study area (Calgro m3 Group, 2016)

The development has been recognised through several awards. It obtained best project of the year in 2013 by the South African Housing Foundation, the Govern Mbeki Awards for best FLISP Project, best Integrated project and best informal Settlement Upgrade in 2014 and in 2015 best Social Housing Project (Calgro m3 Group, 2016).

1.5.2 Cosmo City social housing development (Region C)

Cosmo City development is an integrated mixed-use housing development located on the north western part of the City of Johannesburg between Lanseria Airport and Randburg. It has an estimated 12 300 dwelling units developed on 1105 hectares of City owned land. Cosmo City is estimated to house between 65 000 and 70 000 people (Urban Dyamics, 2009).

The project was an attempt to eradicate two informal settlements known as the Zevenfontein and Riverbend informal settlements through the partnership between the Provincial Government of Gauteng (Local Government and Housing), the City of Johannesburg and the private sector CODEVCO, which was a Joint Venture Between Kopanong Ke Matla and Basil Read Developments (Urban Dyamics, 2009). This was a multi-tier public-private partnership (Haferburg, 2013).



Figure 2: Cosmo City Housing Types

Picture credit: Online

Cosmo City had mixed uses, mixed housing typologies and mixed housing tenures. This development, like Fleurhof has a mix-use development element which are inclusive of approximately 5000 low-income BNG housing units (R0-R3500 household income per month), 1000 Social rental Housing units, 3 000 FLISP/GAP (rental) housing units and 3300 free standing open market bonded units, 12 schools, 43 parks and recreation facilities, 2 shopping malls, 1 community centre with a hall, police station, library, cemetery and several churches (Urban Dynamics, 2009).

1.5.3 South Hills (Turffontein – Region D)

South Hills Development is privately-owned land located on the south of Johannesburg. Like Fleurhof, it was developed by Calgro M3 as an integrated residential project, in partnership with the City for a total of 6204 dwelling units and it accommodates a total of 32000 people (Khan, 2014).

It is one of the integrated housing developments in the province of Gauteng and one of the 2015 Premier's Mega Projects as well. The entire development is composed of different types of dwelling units and tenures. The development has specific economic target markets for all tenure types: fully subsidized BNG housing, GAP housing (Social, FLISP & open market rental) and Bonded housing (open market) (Calgro m3 Group, 2019).

The development has a mix-use development element which are inclusive of approximately 1 904 BNG housing units, 457 Social Housing units, 2397 FLISP/GAP and rental housing units and 1446 free standing open market bonded units, 43 business Erven, 7 non active and 39 active parks Erven, 2 school Erven, 1 Municipal Erf and 11 community/religious Erven (Calgro m3 Group, 2019).

The City of Johannesburg has used the development to drive infrastructure development in the area and surrounding, specifically bulk (water and sewer), road and internal infrastructure (Joshco, 2019). The City intended to use development to unlock further residential developments in the surrounding area. The development has also introduced green initiatives to save water and energy. The development is big and integrated to meet the social and economic needs of the resident by providing amenities in close proximity, thus is it suitable for this study (Calgro m3 Group, 2019).

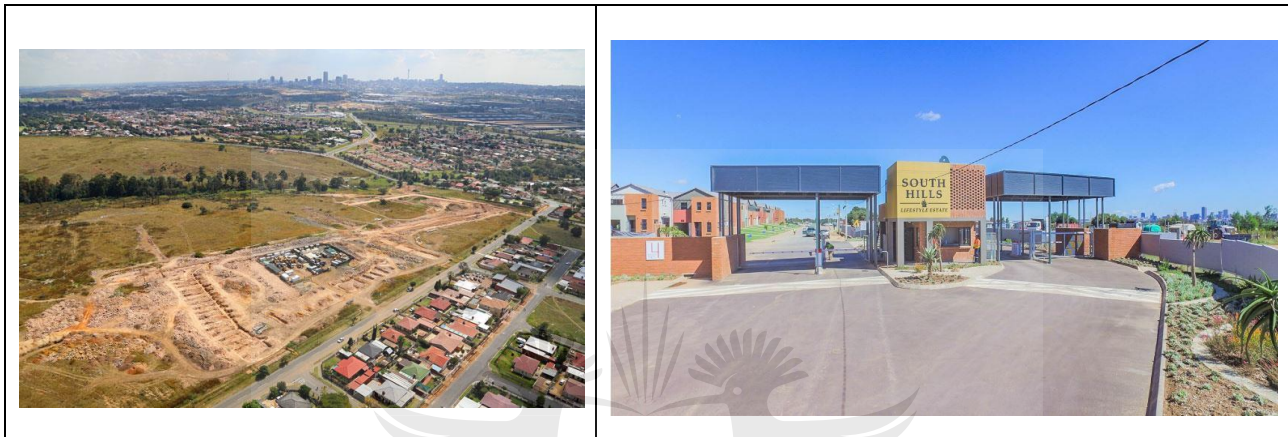


Figure 3: South Hills Study Area (Calgro m3 Group, 2019)

1.5.4 Inner City Development (Casa Mia - 37 Soper Street, Berea. – Region F)

Erf 160 Berea situated on number 37 Soper Street Berea in administrative region F of the City of Johannesburg is one of the city's revitalisation development aimed at providing affordable rental accommodation for low income groups. It provides an opportunity for low income earners to live in the city close to socio-economic opportunities. The building was built in the 1940s as a hotel. The CoJ bought Casa Mia in 1984, It has now been refurbished by Joshco. and converted into rental housing (Joshco, 2019).

Initially developed in the 1940s as a hotel, the 11 storey Casa Mia consisting was converted in 1984 for 179 dwelling units inclusive of bachelor units, two-bedroom units and shared accommodation by JOSHCO. The rental options ranges as follows:

- R800 – shared accommodation.
- R2000 – bachelor units; and
- R2500 – two-bedroom units.

This project was unveiled during the Growth Development Strategy (GDS) 2040 Liveable Cities Network held between 08 to 12 August 2018. This was part of the dialog around city planning and human settlements. Other subjects included the environment, health and

poverty, sustainability, transportation, governance, community safety, smart cities, and economic growth. Most issues were identified with regards to housing, transport and affordable energy and water supply.



Figure 4: Casa Mia Building (Joshco, 2019)

The intention is to bring people close to transport systems, opportunities, and work. This will contribute greatly to achieving the liveable city goal by 2040. This development will accommodate people who will be left out as a result of the inner-city revitalisation initiative (results of gentrification). It will at the same time rid the city of illegal building occupation (City of Johannesburg, 2019).

1.6 Research methodology

The research methodology used (as described in chapter 3) was that of a qualitative inquiry. The design was a case study of the CoJ, with four study sites, namely, Fleurhof, Cosmo City, South Hills, and Casa Mia. Multiple data collection methods were used. The primary method was a Delphi Survey, then interviews, documents, and spatial analysis. The analysis methods were also multiple in accordance with the collection methods.

The methodology was best for this study. It comprised of extensive data collection strategies and vast data sources, the panel of experts was diverse, and the resident respondents were very instrumental in giving a clear picture of the housing and community development situation in the city.

1.7 Limitation of the study

The study was limited in scope as only four study sites were used to study the entire City on the development of inclusive communities. The methodology was limiting due to the fact that it required a lot of time to gather and analyse data and before the third round could be carried out almost 50% of the Delphi Survey panel was unavailable.

However, the study was well managed, and the Delphi Survey was supported by other multiple methods to ensure that the study is not compromised. Multiple methods of collecting and analysing data improved the objectivity of the researcher and enabled verification of the data.

1.8 Significance of the study

This study provides an opportunity to answer questions in planning that are imperative to the sustainability agenda (inclusivity, goal 11), more specifically around housing development. Questions such as how to plan, what to plan for and where to plan can go a long way in helping understand how in the last decade South African major cities have been promoting, planning and developing communities that are in line with the urban sustainability agenda and consequently help plan better for socially and economically thriving communities (Patel, 2015).

The study has the potential to provide knowledge on how we can possibly restructure the spatial economy, shed light in understanding poverty and inequality and how housing contributes to either perpetuate poverty and inequality or eradicate them (Arthurson, 2002).

1.9 Structure of research

This research paper is structured in the following manner:

Chapter 1: Introduction and Background

This section highlights the need for the study, how it can contribute to the body of knowledge and in practice, and what it aims to achieve. It gives a detailed description of the study area and why the study area was suitable to achieve the objectives of the study.

Chapter 2: Literature Review

This section reviews literature on housing challenges, the policy, in both developing and developed countries, and also the subject of poverty and inequality. In order to understand

how the rest of the world have been planning and addressing the abovementioned, the researcher reviews international best practice relating to inclusive housing development.

Chapter 3: Research Methodology

This section outlines the process which the researcher followed in conducting this research. It is the blueprint of the study and it provide in-depth detail of data gathering, processing, and measuring of progress, including the platforms used in this regard. This basically describes the research approach, the design and the related techniques used to carry this study.

Chapter 4: Data Analysis and Findings

The purpose of this section is to describe the data gathered during the Delphi Survey, the interviews, in the documents and through observations and spatial analysis to provide interpretation and meaning. The interviews, document analysis, spatial analysis and observation were done after the Delphi Survey. The chapter will provide information on the organisation and interpretation of data as per the questions posed in chapter 1 of this document.

The data was analysed by grouping data into recurring concepts/themes, mapping of the spatial data and statistical graphs on the panel consensus level. The paragraphs below interpret the findings.

Chapter 5: Discussion and Recommendations and Conclusions

The previous section is a review of the responses and all the data gathered to address the research questions listed in the first chapter. The section also addresses the results. The aim of this chapter is to focus on the research questions and objectives as outlined in Chapter 1, in terms of the literature review and research findings in chapter 2 and 4. In addition, the chapter includes a discussion of the results and makes recommendations based on this information. It also provides the full analysis with the conclusions.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

There is a mammoth amount of literature on housing development, housing finance, sustainable human settlement, and housing delivery resulting from the vigorous debate surrounding the issue in post-apartheid South Africa. For the purpose of this research three main topics of the body of literature are discussed, namely, housing challenges, the policy, in both developing and developed country, specifically in South Africa, and poverty and inequality.

The main objective of this literature review is to describe the:

- Housing conundrum in South Africa.
- Define the concepts of inclusivity and sustainability; and
- Unpack the policy and determine the challenges covered by the body of literature on housing and inclusive communities in developing countries.

To get a more substantive understanding of the housing dilemma and the challenge of inclusivity in housing development, the literature also reviews international best practice relating to inclusive housing development. This review will give an overview of the current relevant topics and debate in housing, and inclusive community development.

2.2 Describing the housing conundrum

The housing issues worldwide are rooted in the definition of housing. Literature dating back to the 1970's highlights the significance of understanding the concept to deal with housing challenges. In this era housing was expanded beyond what people demanded to what could be provided, John Turner (1972), implying that housing is more than just a shelter, and that it has an underlying value system that emphasise human needs and value, going beyond the house to opportunities, what those materials provide, and what service and opportunities they provide to the beneficiaries of such projects (Turner, 1972).

This was mostly understood in developed countries and was greatly unconceivable in the developing world where housing provision is integrated with the social and economic infrastructural components, and therefore generally extend well beyond the provision of a shelter only. Since the 1980's, particularly in developed countries, housing provision was seen as an extension around both the socioeconomic and physical infrastructural value

system, with more emphasis on the contribution of the private sector in housing provision for lower income groups, with or without public subsidies. (Murie, 2018).

In the developing world, including the African continent, most countries gained independence from an era of systematic oppression from the 1960's onwards (Simon, 1989). Free market models could not be introduced to address housing delivery considering that at least half of the population was living in abject poverty (Wilkinson, 1998). As a result, a social approach was adopted to address poverty and inequality, an outcome of long term segregation and oppression, by providing government subsidised housing for the previously disadvantaged communities and individuals (Newton & Schuermans, 2013).

To date there is at least an understanding that housing delivery goes beyond the provision of shelter only, but present opportunities that would otherwise never be realised without associated security and an opportunity to actively participate in the economy.

While developed countries are faced with challenges of the shrinking housing market according to Maliene, et al (2008) and Murie (2018), developing countries are confronted with management and corruption challenges and South Africa has been confronted with lack of participation, disproportion in location of low cost housing developments, urbanisation and unemployment challenges, in addition to management and corruption challenges (Manomano, et al., 2016).

With regards to housing development location, in cities such as Paris for instance, housing development followed employment location and job availability, so development followed where the opportunities were (Buczowska & de Lapparent, 2014). Whilst in South Africa there is a culture of perpetuating housing delivery in peripheral locations, in most cases to further local based political milestones, and agendas as was the case with Botshabelo (Marais, et al., 2016).

Housing policies in South Africa in the last 20 years have resulted in monotonous and uniform settlements on the periphery; poor quality units, large numbers of poor people concentrated in the "old black townships"; and poor-quality residential communities without the necessary social facilities and supportive infrastructure. Unintentionally, majority of these policies reinforced the apartheid spatial structure in post-apartheid South Africa (Khan, 2014).

In many developing countries most policies had shortcomings that were detrimental to housing development (Levenson, 2012). These policies did not take into account the scale of the housing problem (Björkman, 2013), and the growth and expansion of informal settlements in places of economic opportunity (Ren, 2018), which developed in many countries and cities despite housing delivery, South Africa, India and Brazil being prime examples (Alves, 2016).

According to Ibimilua (2011), in many African countries housing policies and programmes were blunt instruments in response to very diverse housing needs that were not fully understood. This kind of approach in South Africa failed to highlight the importance of rental housing or alternative housing options. In a dynamic economy in a developing country like South Africa, the hopes of bringing in the private sector to the provision of housing to low income groups proved difficult to achieve. Thus, very little was achieved as investment risks remained high because of the lack of rental culture amongst other things (Goebel, 2007).

Related literature promotes housing delivery as an instrument that can be used in developing sustainable human settlements and has the potential to encouraged spatial restructuring. Focus should be on well-located mixed-use and mixed-income housing projects; that are championed by both the public and the private sector then sustainable communities can be realised (Newton & Schuermans, 2013). Encouraging more diverse forms of housing through well-structured housing programmes, paying more attention to social and affordable rental housing options is advocated for (Arthurson, 2002).

In addition to this, in encouraging PPPs, local government should be given the mandate for housing delivery as they are directly linked to the private sector. This will encourage integrated settlements that are linked to the social aspects of development such as jobs and socio-economic opportunities thus, improving inclusivity.

2.3 Policy on housing and inclusive development

The most relevant policies and pieces of legislation were identified for the purposes of this literature review. They provide theoretical, and practical strategies and approaches in informing development and their intention to address housing and community development challenges, as well as poverty and inequality. The focus of these policies is streamlined, as they aim to create a society that is socially and economically functional.

2.3.1 The White Paper on Housing of 1994 and RDP

The White Paper on Housing of 1994 was the first attempt at addressing the housing challenges in South Africa. It was part of the Reconstruction and Development Programme (RDP) and it aimed at creating viable, integrated settlements where people would not only be provided with basic shelter, but also to have access to infrastructure, opportunities and services (Wilkison, 1998). Security of tenure was the most important part of the success of the initiative together with the participation of other stakeholders, such as the private sector (Goebel, 2007). This policy however, ended with unintended consequences such as development on the periphery, corruption, poor-quality housing, and lack of community participation. This led to the creation of socially and economically disadvantaged communities, exclusively inhabited by the poor (Khan, 2014).

The policy which approaches housing challenges from a different perspective, is the National Housing Act of 1997. It recognises housing as a basic human right, and an integrated part of planning as well as a vital part of the socio-economic well-being of a country and by implication of a city. It brought forth the most important principles of community development. According to Mackay (1999) The National Housing Act highlighted the following principles:

- Housing must address poverty and inequality by addressing the vulnerability of the poor,
- The housing process must deliver a variety of housing and tenure opportunities (Manomano, et al., 2016),
- It must be economically and financially affordable,
- It should be integrated in a way that creates economically and socially viable communities (Khan, 2014),
- It must facilitate participation of all affected stakeholders and investors and also ensure that people (low and middle income groups) can fulfil their own housing needs in a socially and economically sustainable environment (Khan, 2014).

2.3.2 Constitution of the RSA 1996 & National Housing Act of 1997

The National Housing Act of 1997 was greatly influenced by the Constitution of South Africa of 1996. Section 26 of the Constitution recognises access to housing as a basic human right, which relates to the above-mentioned principles. Under Section 26, it stipulates that everyone has the right to access to adequate housing and that the state must ensure that

this right is progressively realised provided all the resources available (Heyns & Brand, 1998). This section of the Constitution has raised debates on the meaning of “adequate housing” in South Africa, which was already intensifying internationally. This influenced South African policies greatly as it led to the recognition of the global agenda. However, to date the concept of adequate housing is still being debated.

2.3.3 National Housing Code 2000 & 2009

In terms of the literature, the National Housing Code 2000 was one of the policies that were put in place to provide standards for housing delivery, specifically for low income households. It was aimed at implementing state social housing programmes that were supposed to provide secure tenure, empowerment and access to social services (Manomano & Tanga, 2018). But despite its’ good intentions, it also resulted in unintended negative consequences such as restricting the relationship between the public and private sector in providing housing, in illegal ownerships, informality and consequently poverty, social stress and vulnerability due to poor management of the implementation process (Hoossein, et al., 2016). The Housing Code was reviewed in 2013 to address some of these issues, and to improve and to retrofit existing social housing built during the RDP (Mohlakoana, et al., 2017).

2.3.4 Breaking New Ground, 2004

Subsequent to the Housing Code came the Breaking New Ground, 2004. A directive which basically turned things around for housing development, more especially in the urban areas. It focused more on the role of the local government in responding to housing demands, moving away from a supply driven to a demand driven housing development. Whereby, the local government determine the where, how and type of housing to develop (Ziblim, 2013). It aimed to promote housing development in desirable locations, favouring in situ-upgrades over the eradication of informal settlements. What is important to note with this policy is that it emphasised the creation of sustainable socio-economic living environments that integrate socio-economic services with infrastructure and land use and with the private sector being the main provider of low-cost housing opportunities to ease the burden on the government (Tomlinson, 2011), thereby adopting a private-public partnership approach. The BNG resulted in award winning housing developments such as the Fleurhof Development.

2.3.5 NDP 2030 & LED Framework 2018

The most recent and relevant policies, in the subject of housing and community development, are the National Development Plan (NDP) 2030, and the Draft LED Framework of 2018. Both these policies address a diversity of issues, but also recognise that sustainable and inclusive development underpin the development of sustainable and viable communities.

The main focus of the NDP Outcome 8, is promoting access to affordable and quality living environments by addressing dysfunctional settlements patterns and addressing limited housing stock. It encourages the prioritisation of development in cities, around development corridors, transport hub and economic nodes; preventing housing development in poorly located areas and also ensuring access to basic services, and economic opportunities (Karriem & Hoskins, 2016).

In terms of the Medium Term Strategic Framework (MTSF) 2014-2019, its key targets which are strategically aligned with the targets of the NDP 2030 are to capacitate municipalities so that they are able to effectively deliver basic services to the people of South Africa. The targets include increasing water supply, sanitation electricity and improve public participation (Republic of South Africa, 2014). Many of the housing targets were meant to be achieved by 2019; 2019 has come and gone, there are no records as yet measuring whether these were achieved. These targets include:

“Adequate housing and improved quality living environments, with approximately 1.4 million more households living in new or improved housing conditions by 2019. A functional and equitable residential property market with a target of 110 000 new housing units delivered in the affordable gap market by 2019” (Republic of South Africa, 2014, p. 27)

The LED on the other hand encourages the creation of economically viable communities where people can negotiate their daily living in a sustainable and inclusive manner (Abrahams, 2018).

2.3.6 City of Johannesburg Policies

On a more local level, the City of Johannesburg has developed two most relevant policies in urban development, housing, and community (city) development. The Spatial Development Framework, 2040, and the Johannesburg Inclusionary Housing Policy 2018.

In Johannesburg access to core services improved in the last 2 decades but access to economic and social opportunities has remained unequal (Pieterse & Owens, 2018) and these policies are focused on addressing this pressing issue of access.

The SDF 2040 has a vision of developing an inclusive city that is compact with easy access to social and economic services, doing away with development on the periphery of the City by encouraging infill development in already existing and well-established urban environment. (Mudau, 2019). One of the City's concept is creating an "Inclusive City" which intends to ensure a balance between service provision (hard and soft) and opportunities for all by diversifying land uses, promoting social mixing and bridging social, spatial and economic barriers.

The Inclusionary Housing Policy, 2018 requires that a proportion (30%) of a residential development that is 20 dwelling units and above be reserved for low and middle-income group. These are income groups earning R7000 and less (City of Johannesburg, 2019). The policy provides options to achieve this income and social mix vision by either capping the rental cost of each unit or capping the size of the units, which by default lowers the cost. This policy is read with the SDF 2040 and its vision and objectives are same as the SDF 2040. Inclusionary Housing is an American Land Use Strategy that aimed at addressing the housing need of lower income households (Calavita, et al., 1997) and the affordability of housing (Schwartz & Johnston, 1983).

The Johannesburg Inclusionary Housing Policy is the first adoption in South Africa of this housing and land use strategy at a local level. This is 13 years after the National Inclusionary Housing Policy (IHP) of 2007, which is a framework for inclusionary/affordable housing policy (Department of Human Settlement, 2007). Implementing such a policy at a local level is a power struggle as the city has powers in terms of the Constitution for municipal spatial planning and inclusionary housing has a lot to do with municipal spatial planning. The implementation of such a policy at a local level is what led to the BNG really breaking the ground (Haferburg, 2013) and of the IHP not taking root earlier as the municipality was not participating yet.

In achieving the inclusive city, the City of Johannesburg encourages proximity between residential development to social and economic services. This means providing different uses within close proximity to each, uses that supports the residential component in a neighbourhood (Mudau, 2019). These are the policies that will host the future of housing in

the City of Johannesburg and are of the utmost importance in understanding how policy is going to shape the city.

2.4 Key challenges in achieving Inclusive and sustainable communities.

Haughton (1999) assert that sustainable development is about recognizing and accepting our beyond where we live, but in the broader society, looking beyond the environment to consideration of the social, economic and political system of decision making (highlights an institutional approach). Norberg and Cumming (2008), emphasise sustainable development as ethical, efficient and equitable use of social and natural resources. Equitable in a sense that development ensures inter and intra generational equity, ethical that it protects present and future values and lastly efficient in a sense that interventions use the least resources necessary for development. Brandon and Lombard (2011) concur with these concepts of sustainable development and define it as a process of meeting the aspirations and needs of people without negatively impacting on present and future generations, and their chances to meet their needs and aspirations.

What is important to note from the above is that the concept of sustainable development is approached in diverse ways by scholars, but they all arrive at the same point: meeting needs of present and the future. Thus, one can infer that sustainable development is (1) a process, (2) is about both the present and future development, (3) it is about values and principles; and (4) it involves institutions (human decision-making bodies). It is a development process that caters for both the present and future development aspirations and is guided by values and principles that forms part of the decision-making process.

On the other hand, the concept of inclusive development focuses on three main aspects, namely the social, ecological, and political dimension of development (Gupta & Vegelin, 2015). It is rooted in the concepts of human rights, equality, and redistribution (Sachs, 2004), as this was expressed in the Millinial Development Goals (MDG's) and now evident in the SDG's. It aims to empower the poorest of the poor (Gupta, et al., 2015) by creating social and economic opportunities for them through participation in economic, social and political aspects of development, and through investment in human capital, with the intent to improve access to infrastructure, amenities, quality living conditions and socio-economical well-being.

The SDG's present inclusive development as having these three dimensions, each with related principles, while the MDG's emphasised more on social inclusiveness and less on ecological and political inclusiveness. Social and economic inclusivity is marked by certain principles inherent in the SDG's according to Gupta and Vegelin (2015). These are 1. Sharing of development opportunities, 2. Enable effective participation and involvement in the politics of development, and 3. Protection for the poor, which means they must have access to basic infrastructure, amenities, improved conditions of living and socio-economic wellbeing (Gupta & Vegelin, 2015).

Inclusivity and sustainability are multi-level challenges that in politics they are very difficult to achieve due to the trade-offs that comes with the territory. Ecologically/environmentally trade-offs can be balanced, but due to the pressures provided by growing population are rarely achieved. Socially and economically there seems to be a continued conflict over which drives the other, and which is dependent on the other. But simply put, both these concepts are not complex, it is a question of execution. 1. On a global level they are about developed countries accounting for the least developed, 2. On a regional level they are about taking into consideration the vulnerability and challenges of other countries and helping them through shared resources, 3. On a national level they are about taking into consideration marginalised communities, sectors and places and lastly, and 4. Locally they are about accounting for the people of the local area, the city (Becker, 1998). In a nutshell, the main challenge in achieving inclusive and sustainable communities is in balancing the trade-offs between politics, social development and economic development at all levels, and also accountability to the least developed and vulnerable, the poor and marginalised.

2.5 Inclusive growth/development, poverty, and inequality in African countries/cities

The above highlights the dimensions of poverty and inequality and how they impact on inclusivity and sustainability in development. This is a frequently studied field in developing countries (specifically Africa). Many scholars in this field, such as Tumusiime and Matotay (2014) and Fosu (2015) believe that to effectively implement policies and strategies in the developing world, more specifically Africa, and to achieve inclusivity from the broader to the lowest scale of society (communities), it means development policies must be developed to reach all strategic actors and sectors to have the capacity and power to overcome institutional and political obstacles.

Other scholars such as (Lustig, 2016), have come to understand that it is about lobbying those who are only interested in maintaining the status quo to push forward policies of inclusivity, and empowering those who are willing but have less political influence. Robert Chambers asset that participation is an important aspect in poverty alleviation in a manner that will permanently improve people's well-being. The involvement of different stakeholders and professionals in understanding poverty from those who live it and then respond from there on can result in a sharp reduction (Chambers, 2007).

In the past few decades Africa has experienced high rates of economic growth, but despite this inequality is still increasing. The absolute number of people living in poverty growing, and many Africans are being left behind (Barros & Gupta, 2017). This can be attributed to a cluster of poverty, that Chambers refers to as "material lack or want" which is about lack or poor access to services, low quality asserts and lack of wealth (Chambers, 2006). For development in Africa to be inclusive, there must be a considerable amount of investment in productivity. The sectors that drive economic growth need to be supported by efforts to reduce inequality through redistribution and access to basic services (Tumusiime & Matotay, 2014).

In understanding how poverty an inequality may impact inclusivity in development, it is important to debunk some misconceptions about economic growth and development, more specifically in Africa. Economic growth often doesn't benefit the poor, it predominantly benefits politicians and economic elites (Barros & Gupta, 2017), and (Anyanwu, 2014). Because of this the link between economic growth, poverty an inequality has been unclearly defined, and it is evident in many African countries (Fosu, 2015).

Thus, there should be policy and practice interventions to trickle down the benefits of economic growth down to the poorest of society. In Senegal and Burkina Faso poverty has been reduced with growth in the economy while in countries such as Rwanda and Ethiopia poverty has not declined despite sustainable economic growth (Anyanwu, 2014). (Why in the one country and not the other? On the former countries they had redistribution interventions while the latter did not) In South Africa the upliftment of the poor has been disappointing despite being amongst the most develop countries in Africa partly because of failed redistribution policies (Barros & Gupta, 2017).

Literature emphasises six domains that can potentially address poverty and inequality in a manner that promotes inclusive development and growth. These should form part of policy

discussions going forward in the poverty, inequality, and inclusivity debate. These domains include spatial development and spatial equity, economic growth with a focus on structural transformation, social protection, productive employment (not just increase in income), access to basic services and quality governance. But what is also important is to note that social and economic exclusion in each and every development are a result of poverty, inequality, unemployment and also lack of government involvement and commitment.

2.6 Inclusive housing development: international practices.

This section discusses the understanding and approaches in social inclusivity and housing development applied in two developed countries, namely Germany and Australia. It is important to note the differences in their point of departure which greatly indicates their level, direction of their development, and the great degree of variation in their development challenges, which are substantially different from those applied or absent in developing countries.

2.6.1 Germany: Co-housing

According to (Droste, 2015) what is prevalent in Germany is co-housing, which is a policy agenda that focusses on the political aspects of housing. It embodies collectiveness, evident through the participation of residents in the planning and development to management of housing development and their communities. Droste further identifies co-housing as “self-organised building collaborations and community driven housing within the rental sector and it includes former squatters (informal settlements in South Africa)”. This is dedicated to offering a good mix of social and economic opportunities while enjoying security of tenure (Droste, 2015).

Over the years in some places it has resulted in a mixture of different social groups while in others in a mixture of lifestyles. This is predominately done by middle and lower middle-class groups and there are more than 1000 of these communities in both rural and urban areas (cities). This was a response to the growing cost of housing in the country and the need to lower the social burden on the middle class. Partnership is the essence of this concept and it has resulted in enhanced neighbourhood quality in both urban and rural areas (Droste, 2015).

Contrary to the co-housing concept in Germany, which was championed by the owners themselves, in Australia they adopted a government approach which resulted in many

challenges, which ended up excluding the poor, the socio-economically disadvantaged, and the unemployed. After this, their focus switched to recognising the importance of ensuring access to affordable good quality housing to low income groups, emphasising the role of the private sector in providing good housing, and moving away from housing (specifically social housing) being exclusively the responsibility of the public sector (Arthurson, 2002). One of their strategies was the “Social Integrationist Concept” which emphasises the role of housing in promoting access to economic opportunities such as employment (Arthurson, 2004).

2.6.2 Australia: Private sales of affordable housing

What the Australian government did to expedite this process of addressing exclusion of low-income groups in the housing sector, was to encourage private sales of affordable public housing without compromising quality; and encouraged medium density development in functional environments. This provided security of tenure to low income groups and gave them some form of economic stability (Arthurson, 2004).

Social integration and access to services are important elements in creating inclusive communities. These go a long way in facilitating social mix in housing developments, more especially in low- and middle-income groups (Vita & Oppido, 2016). As in most developed countries social integration and inclusivity have been successfully introduced in the past few decades, more especially in the area of lower income groups. The only remaining challenge is to include the elderly by developing old age homes in accessible locations in terms of proximity to family, medical support, commercial infrastructure, thereby improving the elderly's ability to also reap socio-economic benefits available to advantaged residents in the cities (Pouw & Bruijne, 2015).

2.6.3 United States of America: Inclusionary Housing Policy

The agenda to provide for the housing needs of low income groups in the USA started as far back as the 1960's, when they introduce what has been recently adopted now in Johannesburg as the Inclusionary Housing Policy (Schwartz & Johnston, 1983). The USA developed a statutory mechanism in the public housing sector to cater for the needs of low-income groups (Arpey, 2017). This mechanism was meant to not only provide houses but to also address the systematic social challenges that existing, like the growing numbers of segregated housing projects, poor funding and poverty pockets which resulted in what they call the ghettos (Calavita, et al., 1997).

The statutory mechanism focused on controlling the behaviour of the private sector. This was termed “inclusionary housing regulations” in the 1970s and 1980s and developers had to comply with regulations such as having to set aside a certain percentage of the units for low income groups (Calavita & Grimes, 1998). The main objectives were expanding affordability and addressing racial discrimination in housing. The best thing about this mechanism was that municipalities enforced these regulation by not issuing building permits if a developer was non-compliant and they could become just regulators and delegate the provision of affordable housing to the private sector, which has been established that they are in a better position to provide quality housing than the public (Pfeiffer, 2012).

As a result, developers grouped the low-income housing units together, away from the market rate housing – creating further income and racial segregation. This increased racial polarisation in some areas and where the regulations were properly followed it increased racial and income diversity (Calavita, et al., 1997).

Under this inclusionary housing mechanism, the City of New York introduced an incentive program which provided developers with incentives for voluntary provision of affordable housing options (Konopko, 2016). The result was the same as the regulatory mechanism, developers created separated entrance, with low income units on separate floors from market rate units. These created what has been termed “poor doors” (Arpey, 2017, p. 637)



Figure 5: Rich door/ Poor door (Source: Jewell, 2016)

“Despite community outrage and even the mayor’s pledge to end “poor door” practices in NYC, the unequal living conditions at the mixed lower income/luxury building at Extell Development’s 50 Riverside Boulevard are alarmingly obvious, according to some residents. As recently reported by The NY Post and 6sqft, the disparities between the luxury side of the building and the affordable housing section continue well beyond the doors.” (Jewell, 2016)

This kind of practices necessitate the need to ensure that statutory mechanism are explicit in what is exactly expected from developers and to ensure that the poor and vulnerable are protected from discrimination that undermines their basic rights to “adequate housing”, which implies better living conditions. In the subsequent years NYC drafted an explicit statute that prohibits the isolation of market rate and affordable units (Arpey, 2017).

2.7 Conclusion

In order for housing to structure the space, change lives, transform society and integrate growth and development, it must focus on not only sustainability, but also on inclusivity, more so in developing countries and major South African cities such as Johannesburg, Durban, Cape Town, Umtata, and Port Elizabeth. Literature covers mostly the sustainability aspect, potential, challenges and opportunities that comes with housing development (Rosenberger, 2009), but not much is said about the inclusivity aspect of housing development more especially in South Africa and Africa as a whole.

Sustainable development is a process of developing in the present with consideration of future development, values, principles, and it involves institutions (human decision making). Inclusive development on the other hand, is about accountability for the disadvantaged and vulnerable in society, about shared resources and opportunities and active participation in society.

Housing is both a social and an economic aspect of development and is confronted with many societal and economic challenges that constantly derail the inclusivity and sustainability agenda, both in the developed and developing world. Current literature has not drawn a significant connection between these concepts, and or how housing is an element of development that can foster inclusivity at a local level. Thus, there is a need to study the role of housing in creating inclusive communities in developing countries.

CHAPTER 3: RESEARCH METHODOLOGY

Research methodology can be defined simply as what the act of doing research is, how it is conducted, how its progress is measured and what makes up its success (Sarma, 2012), it is the blueprint of the study (Carson, 2010). The section below describes the research approach, the design and the related techniques used to carry this study.

3.1 Methodology

The researcher chose qualitative research with the City of Johannesburg as the study area for the purposes of this research. Qualitative research studies non-numerical information within both a natural and an experimental setting (Leedy & Ormrod, 2014). It can debunk perceptions and broaden understanding of certain concepts in society. Qualitative research is best in getting a deeper understanding of a real-life phenomenon from people who negotiate its meaning and implications in their lives or the real world. It provides in-depth information that could not be otherwise unlocked using other methods.

This research deals with questions of *How and What*. These kinds of questions are representative of qualitative inquiry research which aims to describe a process and its constituencies (Ploeg, 1999). This research seeks to understand the mindset, the plans and the approach and it has characteristics of an open-ended enquiry rather than one that seeks measurable and observable outcomes, where the research questions are specific and narrow (John, 2008). Thus, the nature of the study is intended as a qualitative inquiry. Most researchers use this approach to understand underlying issues that can only be captured from those who continuously have to make sense of situations/phenomenon being studied (Leedy & Ormrod, 2014).

3.2 Study design

The researcher chose the City of Johannesburg as the main case study for the purposes of the research. The researcher chose four study sites for the case study as they are best suited to answer the questions and the objectives of the study. A case study is defined as the process of examining a case and/or phenomenon. It involves conducting systematic and critical inquiry by examining extensive, detailed and varied data of a phenomenon and subsequently gathering understanding of the case to contribute to the body of knowledge (Leedy & Ormrod, 2014). This is through an in-depth description and analysis of the data.

The reasons behind this choice is to explore the City of Johannesburg's low-middle income housing developments that were developed through PPPs.

Low income housing refers to housing that is affordable to people earning between R7 500 and bellow, it extends to cover those earning below ±R18 000. The study design and its related methods can address the research questions and achieve the aim and objectives of the study (MacDonald & Headlan, 2011).

The literature assert that case studies are suitable in investigating problems such as practice based problems, where the experiences of those who interact with the system in which the context of each interaction is critical are being studies (Leedy & Ormrod, 2014). The researcher chose this design as it is a good tool to draw attention to what has been happening in housing development specifically in Johannesburg to understand the shift in the housing development agenda in the recent years in line with the development of the global sustainability agenda (Stake, 2008).

The selection of a specific case improves the quality of the study in terms focusing attention on a defined case. As much as the information cannot be generalised, cases can be changed to study the same phenomenon in a different case. It is important to understand the depth the case than generalisation. Thus, a case study was best suited to understand Johannesburg development, specifically Johannesburg development (Stake, 2005).

Furthermore, because case studies focus of experiential knowledge of the case being studies and give close attention to how factors such as its context, the politics, social and economic factors have affected it. It is able to capture and optimise on how the development agenda is shifting, paying extra attention to how the activities of development affect the case including the plans and policies. It allowed the triangulation between activities, knowledge and context, meaning data could be collected from a variety of sources, thus giving a better understanding of the case and/or phenomenon (Stake, 2008). Triangulation is the process of combining and using “**data** drawn from different sources and at different times, in different places or from different people” (Flick, 2004). This goes a long way in supporting the validity of the case study.

The purpose of this study was to provoke new ideas and thoughts around the role of housing in creating social and economic inclusivity, it was not to question existing theory. Thus, a

case study was advantageous as it unlocked knowledge and the complex reality of the case being studied, that being the City of Johannesburg (Siggelkow, 2007).

According to Robert Yin (2013) the key challenges in case studies are generalisation and validity, this sentiment is also shared by Tsang (2014). Case studies are criticised for not being generalisable as compared to other designs. As already mentioned above, as explained by Stake (2005), it is more important to understand a phenomenon or case in depth than the persuasion of generalisation.

The researcher used triangulation, the use multiple data sources to strengthen the validity of the study (Skulmoski, et al., 2007). The way the study was design and conducted it can be replicated using different cases or studying a different phenomenon and still be a reliable study. This goes to show how measures were taken to ensure that the study is valid, which included the proper management of data in addition to triangulation. As much as the study cannot be generalised as it is specific to context, the social and economic climate. It is however, understood in depth enough to start a conversation around social and economic inclusivity in South African cities.

3.3 Sampling

The study has two groups of populations which were selected purposefully as they either live in the study area, planned it, executed the plans, or influenced the developed in some form or fashion. The two groups are residents and people with expertise in the field. They are City officials (Town Planners), public and private developers and consulting Town planners and other professionals in the Built Environment and related fields.

To arrive at an appropriate sample that will represent the entire population Cochran's Formula was used for both population groups (Cochran, 1977). This formula is best in determining the sample size when the population size is unknown.

$$n_0 = \frac{p(1-p)}{\delta^2} + 1$$

The researcher had 70% confidence level in the two population groups responding to the study, with their responses having 5%(i) margin of error. It is assumed that a proportion of 95% (p) of the population has knowledge and is interested in the topic being studied. Therefore, the sample population is recommended to be:

$$n_0 = \frac{0.95(1 - 0.95)}{\left(\frac{0.05}{1.64}\right)^2} + 1$$

$$n = 21.5504$$

A sample of 21 respondents will be sufficient in providing the study with information that will represent the entire population of experts. Kendall and Kendall (Kendall & Kendal, 2010) formula also arrives at the same conclusion, provided the same information described above. It recommends as follows:

$$n_0 = \frac{z^2 p(1 - p)}{e^2}$$

$$n_0 = \frac{(1.04)^2 (0.95)(1 - 0.95)}{(0.05)^2}$$

$$n_0 = 20.5504$$

The extra one respondent participating in the study will not necessarily affect the outcome of the study, as asserted by Cochran, it is insignificant. For purposes of this study a sample of 20 expert panellist was used. In line with the statistical recommendations. This might seem as a large sample for the expert panel but according to (Grobbelaar, 2007), the higher the sample size the higher the reliability of group responses.

For the second population, the resident populations - another Cochran's formula was used with the information that the developments have approximately 17 723 dwelling units of low-cost housing. So, the number of low-cost housing in the developments was used as the population size (N), the researcher also used the recommended sample from the previous formula of a sample size of 20 respondents (n₀). The formula that will modify the sample accordingly given that the population is known uses the following equation:

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}}$$

$$n = \frac{20}{1 + \frac{(20 - 1)}{17723}}$$

$$n_0 = 19.979$$

The sample size for the resident population that can represent the entire population is 20 respondents (household). Therefore, the total sample size that best represent the opinions of the entire population of both experts and resident is a minimum of 20 respondents (households). This sample used the minimum sample to collect data for the study, of which more than the required 20 people responded.

3.4 Data collection strategies

Multiple methods of data collection were used, these included observations of the study area, interviews which were from random residents. For the City Planning officials, consulting planners, developers' and other experts in the field questionnaires were used (through the Delphi Technique and Likert scales) and also, written documentation of policies and literature were also used as sources of data.

3.4.1 Interviews

Literature indicates that the most frequently used data gathering method is the interview method which enables researchers to collect primary data, making it easier to get accurate information and immediate feedback from respondents. Without the interviews, it could have been possibly challenging to obtain important information and facts for this study (Neuman, 2014). This method allowed the researcher to get clarification and explanations from the respondents (Leedy & Ormrod, 2014). Therefore, open-ended interviews and conversations were carried out on this study specifically with the residents.

The interviews were conducted face to face so, the results are accurate and in complete outline and thoroughly probed. Face to face interviews made it easy to probe but a bit time consuming to gather and analyse the responses. However, there was no lack of responses or vague responses in the interviews as researcher was able to probe interviewees directly for further clarification when faced with inconsistencies.

The interview procedure involved randomly choosing participating residents in the study area and surrounding. These respondents were selected because they live within or around the development. The interview questions were formulated to gather information from the residents, and they were just guiding questions. The questions covered two topics: effective public participation and socio-economic opportunities.

Interviews conducted with the residents were in Cosmo City and Fleurhof as they have been staying in the developments for a substantial amount of time. Two open ended questions were posed to the residents about the opportunities that they enjoy from having stayed in these developments and whether they believe they are or can effectively participate in the development of the community from which they stay, being Fleurhof and Cosmo City.

The question of opportunity was broken down into more specific questions:

- Do you have reasonable access to social facilities and amenities (education, health, safety and security, recreation)?
- Do you have access to economic opportunities (something that can make you a leaving including infrastructure and transportation)?

The question of effective participation was broken down into more specific questions:

- a) Do you participate in development in the area?
- b) Do you feel your views are valued during public participation meetings?

For the purposes of this research Low-middle income group will be defined as per the Johannesburg Inclusionary Housing Policy, 2019 of people earning R7000 and less and reasonable shall mean adequate.

3.4.2 Delphi process - Questionnaires

For the purposes of collecting in-depth data from the expert sample The Delphi Technique was used. The Delphi Technique is a process of collecting data mostly used on a sample of respondents with expert knowledge of the topic currently being studied (Hsu & Sandford, 2007). This process is appropriate when trying to understand and correlate expert opinions and identify where there are diversions or convergence in the understanding of the present and the possible future (Grobbelaar, 2007). The idea is that, well informed respondents with full insight and experience on the topic are best suited to participate in a rigorous contestation of ideas.

The Delphi Technique is suitable also in studying long term issues (Hassan, et al., 2000), such as the housing issues in South Africa and it can provide insight to policy formulation, which is very important specifically on the topic of low-middle income housing development and inclusive development. The Delphi technique provides many opportunities in debunking and understanding complex phenomenon as compared to other methods (Yousuf, 2007).

According to Yousef (2007) a Delphi Technique is most suitable if: (a) "the problem does not lend itself to precise analytical techniques but can benefit from subjective judgments on a collective basis" (Yousuf, 2007, p. 5); and (b) "individuals who need to interact cannot be brought together in a face-to-face exchange because of time or cost constraints" (Yousuf, 2007, p. 5). These were both cases in the study and the Delphi Survey ensured that the study was carried out in manner that opinion were solicited regardless of resource and time constraints.

Likert scale questionnaire was used and distributed via Survey Monkey link through two social media platforms (LinkedIn and WhatsApp), text messages and via email to the panel. Survey Monkey is a website where a researcher can create questionnaires and collect data on a topic with their own or suggested questions and distribute it via an online platform. The Delphi Technique was used to gather information from identified experts in the field, these were consulting Town Planners, Developers, researchers, infrastructure planners and City Officials (Town Planners) and also sociologist amongst others. Two rounds of questions were used, where the first round only solicited general information on the topic on 5 questions. On the second round Likert scales were used to gather in-depth information and specific information based on the themes identified in the first round.

The selection of experts for the Delphi procedure involved choosing participants. These respondents were selected because they, in one way or the other:

- a) Planned the development (or plan similar developments), they have the necessary know how of the overall functionality.
- b) Executed the plans.
- c) Influenced the outcome; and
- d) They are continuously doing research regarding improving the city, its growth and development; and in understanding the housing landscape of the city; thus, the respondents will provide new information for this study.

This panel was selected from the following organisations (their names are withheld as per our confidentiality agreement):

Profession	Number of respondents
GIS specialist – CSIR • Degree in Geography and Masters in Sustainable development (UJ)	1

±7 Years' experience	
Urban Sociology <ul style="list-style-type: none"> Degree in Town Planning (UP) Degree in Information Sciences and Honors in Sociology (UJ) ±15 Years' experience combined	2
Social policy researcher – Centre for Social Science Research <ul style="list-style-type: none"> Degree in Town Planning (UP) ±6 Years' experience	1
Industrial development specialist Degree in Town & Regional Planning (UP), + 35 years' experience	1
Municipal infrastructure planning Degree in Town Planning (UP) Degree in Economics (WITS) ±15 Years' experience	2
Department of human settlements Degree in Town Planning (UP) ±5 Years' experience	1
Housing development Agency Degree in Town Planning (UKZN) ±15 years' experience	1
City Transformation (Joburg) Both Degrees in Town Planning (WITS) ±10 years' experience	2
Social housing department (JOSHCO) Degree in Town Planning (WITS) Master's in development studies (UNISA) ±15 years' experience	1
Infrastructure development Degree in Architecture (CPUT) ±6 years' experience	1
Housing specialist	2
Specialist Town Planners (City of Johannesburg) Degree in Town Planning (UJ), +15 years' experience Degree in Town Planning (UP), ±7 years' experience	2
Consulting town Planners Degree in Town Planning (UP) and Postgrad Degree in Project Management (Damelin), +25 years' experience Degree in Town Planning (UJ), +20 years' experience	2
Coghsta Degree in Town Planning (UJ), +6 Years' Experience	1
Total	+20

Table 1: Expect Panel (Authors data)

Only 16 of the +20 panellists responded to the questionnaire, this is equivalent to 80% of the total sample. According to Hsu & Sandford (2007) at least 7 participants are required for the study to be valid (Hsu & Sandford, 2007).

The first round of the survey was a combination of open-ended and closed questions. The intention was to establish the important themes under the topic. The respondents were required to answer 2 closed questions and 3 open ended general questions about human settlements development in South Africa.

1. List out 5 or 7 roles policies and legislations play in SA human settlements developments at broader level.
2. List out 5 or 7 policies and legislations formulated since 1994 that addresses poverty, inequality, and socioeconomic exclusions.
3. Give reasons why you think PPP is necessary in housing delivery programmes in SA.
4. What key features make up or that can pinpoint that housing can bring about spatial transformation and community development.
5. What are the characteristics of an inclusive community as it relates to housing provisions?

Responses to these questions were collected over a period of three weeks from the expert panel. These responses assisted in understanding the common themes from the expert panel. Likert scales questionnaires were formulated to gather information from the expert respondents on the second round of the study. The questions were based on the themes identified in the first round of the Delphi process.

The second round was a five-point Likert scales Questionnaire consisting of 10 questions/statements. The panel was requested to rate on a scale of 1 to 5 whether they strongly agree or strongly disagree with the statement.

1	2	3	4	5
Strongly disagree	disagree	Neither/indifferent	Agree	Strongly agree

Table 2: Likert scale (Leedy & Ormrod, 2014)

The themes identified in the first round resulted in the following questions in the second round of the survey, with 1 of the 10 questions being an open-ended question (question 3):

- The City of Johannesburg (CoJ) has been creating affordable communities (affordable to different income groups) and inclusive communities (socially & economically) as it relates to housing development.

- The CoJ has been creating integrated communities (different stakeholders, land uses, housing options, public transport) as it relates to housing development
- What are the socio-economic opportunities that comes with low-middle income housing development?
- The prevailing principle in development planning in the CoJ is "socioeconomic and spatial integration".
- The general norm in housing development in Johannesburg is the support of affordable housing in well located areas with access to socioeconomic services.
- CoJ housing policies have improved access to social and economic amenities, services, and infrastructure for low-middle income groups.
- CoJ housing development strategies have the potential to transform the spatial economy.
- Low-Middle income housing can significantly reduce poverty and inequality by providing access to secure land ownership to low-middle income groups.
- The policy and legislation of the city is enough to ensure that all stakeholders effectively participate in housing development.
- The public participation framework and process provide meaning engagements in housing development as the City objectively considers all representations in a public participation process.

3.4.3 Documents and observation

Although respondents significantly contribute to this study and in fact they were the main contributors, they are however, not aware of underlying issues that may have been captured through policy and research (Leedy & Ormrod, 2014). They merely gave opinions and ideas based on their knowledge, observation, lived experiences and their translation and use of policies (John, 2008).

Therefore, important underlying issues that might be important to debunk could have been missed by conducting interviews and questionnaires only. The questions in interviews and Likert scale questionnaires typically show the positive side of the situation, so in giving the holistic view of the study, a collaborative approach in the study the researcher perused documents and took into consideration the area and surrounding through observations. This gave a balanced view of the entire situation as the researcher perused information that they

gathered themselves other than what they obtain through the interviews. This enabled the researcher to test the information obtained through the interview and to validate it.

Documents identified in the first round of the Delphi survey were analysed. These were regarded the most important policies by the panel of experts. The analysis focused specifically on the Normative Framework (norms principles, standards) in these policy documents.

- NDP 2030.
- SPLUMA no. 16 of 2013.
- Social Housing Act no. 16 of 2008.
- National Housing Act no. 107 of 1997.
- Breaking New Ground 2004.
- Johannesburg SDF 2040 + Inclusionary Housing Policy; and
- Johannesburg IDP 2018/19.

The RDP policy was excluded even though it was amongst the policies regarded as very important by the panel, because the BNG is an updated format of it.

The table below is a summary of the data collection method:

Research question	Data collection method	Source of data
What kind of communities are currently being developed and where, as it relates to housing development?	Written documents Questionnaires observations	Local Policy and literature Expert panel Spatial analysis
What are the socio-economic opportunities that comes with low-middle income housing development?	Questionnaires observations interviews	Local Policy and literature Expert panel Residents
What is the current normative framework (norms, standards, and principles) in housing and community development?	Questionnaires Documents	Local Policy and literature Expert panel
Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?	Written documents Questionnaires	Local Policy and literature Expert panel
What is the impact of the current participation procedure in housing policy and development?	Written documents Questionnaires	Local Policy and literature Expert panel Residents

Table 3: Summary of data collection methods (Source: Authors data)

3.5 Data analysis strategies

Methods of analysis involved categorical analysis and interpretation of data in common themes and synthesis into a complete depiction of the concepts (Neuman, 2014), from data collected in the first round of the Delphi Survey. Similar or the same responses were grouped together to formulate questions for the second round. This aided in creating the links between the housing process/development and meeting the social and economic needs of the community through sharing in the development opportunities (Leedy & Ormrod, 2014).

The second-round data was graphed to establish the level of consensus of the panel on different questions related to the questions posed in chapter 1 and to the responses in the first round. According to Hsu & Sandford (2007) data analysis rules in a Delphi survey on how to measure the level of consensus are quite flexible and open to interpretation. The researcher decides what each range represents (Hsu & Sandford, 2007), this sentiment is shared by Nworie (2011).

It is recommended that consensus may have been reached if “at least 70 percent of Delphi subjects rate three or higher on a four point Likert-type scale and the median has to be at 3.25 or higher” (Hsu & Sandford, 2007, p. 4). The questionnaire was a five-point Likert scale. Thus, the researcher decided to use 60 percent as a measure of consensus.

According to (Von der Grant, 2008) there are multiple criterion to measuring consensus in Delphi studies, ranging from percentage of respondents in agreement to other statistical methods such as the medians and mean scores. With regards to percentage agreements, Hassan, et al, (2000) assert that “a universally agreed proportion does not exist for the Delphi, as the level used depends upon sample numbers, aim of the research and resources” (Hassan, et al., 2000, p. 1011). On a study conducted by Loughlin and Moore (1979) consensus was defined as 51% agreement between respondents. While in a study conducted by Seagle and Iverson (2002) consensus was defined as when at least 60% of respondents are in agreement and the majority of the responses fell under “agree” or “disagree” on a 5 point Likert Scale (Seagle & Iverson, 2002). There are other studies that defined consensus differently, 70% agreement (Green, et al., 1999) and even 80% agreement (Crisp, et al., 1997) have been used to define consensus.

In addition to the above the researcher also analysed how the development has impacted the community socially and economically and then relating it back to social and economic

inclusivity through sharing in the development opportunities and participation in development. This was important in highlighting what the opportunities are/were within PPP low-middle income housing developments. The information on what social and economic opportunities exist in and around these developments was mapped (spatial analysis) to better synthesis and observe the complete picture. Information is better understood in complete outlines.

Methods of analysis was in three distinct ways, grouping of themes, mapping – spatial analysis and statistical graphs to get the level of consensus. The above involved interim analysis, writing down memos (constant documenting and reflection on the data collected), theorisation and linking data to theory (Thorne, 2000).

3.6 Data management strategy

The resident respondents did not want to be recorded as planned, so the only means of keeping record was writing down notes. The notes were scanned and stored in google drive for safe keeping. For the purposes of analysis, the data was downloaded from the drive and reloaded as it evolves.

Every respondent was identified through a given code name; this ensured confidentiality.

The Survey Monkey for both the two rounds were limited for a period of three weeks and the responses were limited to one survey per device to curb respondents from taking the survey more than once. The link only worked on the device on which it was first opened so that respondents could not share the survey link. Survey Monkey is a very easy to manage tool and very reliable (Gill, et al., 2013).

3.7 Ethical considerations

Throughout the research process there were no ethical issues that raised from this study and to ensure this, the following measures were taken. The researcher ensured that all respondents were willing participants and not given any incentive to participate as this might have influenced their responses. The interviews were conducted with people of legal age (18 years and older), children were not be interviewed.

3.8 Strengths and Limitations of the study

By using multiple methods of collecting and analysing data, the researcher was able to verify the data to a certain extent against the multiple data sources. Drawing attention to where they converge and where they diverge. As much as most of the data cannot be verified extensively, the results were objectively looked at against the scenarios developed from the responses.

The study was well planned to ensure that the data is accurate, well managed and properly executed to ensure that the information collected is accurate. The introduction of mathematical analysis of the data gathered through the Delphi Survey really helped narrow down the perceptions, opinions, and judgements of the panel. This made it easy to further probe the questions requiring further investigation.

The researcher encountered challenges with the study as it was difficult convincing people to take a minute or two to discuss and answer questions. Since the face to face interviews with residents were random, people were sceptical to participate. People basically have the same attitude towards research interviews as they do telemarketers.

The expert panel could not be directly probed for further explanation when further substantiation could have been beneficial to the study as the survey was sent via a link. On the other hand, 50 percent of the expert panel was not available for the third round of the survey. Likely on the first and second round alone, the survey had already collected sufficient information, so the third round was not conducted.

According to Grobbelaar (2007) respondents can reach consensus before the third round of the survey the same way respondents can even reach the fifth round of the survey without reaching consensus. On a study conducted by Chichetti (2011) on the study of *“recommended clinical practices for patients with ventricular assist devices as destination therapy”* (Chichetti, 2011, p. 15) it had only two rounds and the researcher managed to get scientifically sound results and made reasonable conclusions of the entire study.

Further to the limitations mentioned above, the study was time consuming, it took approximately 3 months to gather all the data in a sequence that would not invalidate the outcomes. It required intensive data processing which the researcher is still learning to do exceptionally but not yet experienced. And because qualitative research is a perception

base study, the comparison of the different data collected through the different methods is somewhat duplicated in the findings and the discussion of the study.

3.9 Study Management

3.9.1 Methods of achieving validity

Interviews were conducted with persons staying in the development and professionals with the practical knowledge of low-middle income housing development. This ensured that the information gathered is limited to the topic and is valid and credible.

The panel on the Delphi survey became unavailable after the second round. To maintain the validity of the study the researcher, instead of sourcing a new panel decided to stop the survey at round two and then use information that was already collected at that stage. Triangulation was used to ensure validity of the study (Flick, 2004). Multiple data/information sources were used to provide substantiation to the information from the Delphi survey (Skulmoski, et al., 2007).

It is important to note that the outcomes of the Delphi Survey are as valid as the opinions of the selected experts that made up the panel and nothing but opinions. This is also not a majority vote but rather statistical summarisation of their viewpoint. So, under the same circumstances, the same research might not yield the same outcome (Yousuf, 2007). The Delphi Technique and the research design of a case study they both have the issues of non-generalisation. But they can form the basis of a bigger debate.

3.9.2 Study timelines

The study followed the following time frame:

Task	Feb-March	April	May	June	July	Aug	Sept	Oct	Nov
Research proposal									
Literature review									
Data collection									
Methods									
Data analysis									
Chapter 4 & 5 write up									
Submission									

Table 4: Study timeframe (Source: Authors plan)



CHAPTER 4: DATA ANALYSIS AND FINDINGS

4.1 Introduction

The purpose of this section is to describe the data gathered during the Delphi Survey, the interviews, in the documents and through observations and spatial analysis to provide interpretation and meaning. The interviews, document analysis, spatial analysis and observation were done after the Delphi Survey. The chapter will provide information on the organisation and interpretation of data as per the questions posed in chapter 1 of this document.

The data was analysed by grouping data into recurring concepts/themes, mapping of the spatial data and statistical graphs on the panel consensus level. The paragraphs below interpret the findings.

4.2 First Round Questionnaire

The first round of the survey was a combination of open-ended and closed questions. The intention was to establish the important themes under the topic. The panel was required to answer 2 closed questions and 3 open ended general questions about human settlements development in South Africa. these questions are as set out below:

1. List out 5 or 7 roles policies and legislations play in South Africa (SA) human settlements developments at broader level.
2. List out 5 or 7 policies and legislations formulated since 1994 that addresses poverty, inequality, and socioeconomic exclusions.
3. Give reasons why you think Private Public Partnership (PPP) is necessary in housing delivery programmes in SA.
4. What key features make up or that can pinpoint that housing can bring about spatial transformation and community development.
5. What are the characteristics of an inclusive community as it relates to housing provisions?

4.2.1 Question 1: Role of Policy in the development of human settlements

When asked what the role of policies are in housing development the panel had diverse opinions. The recurring responses were that policy play a role in guiding development and decision-making processes to achieve Spatial integration (transformation), Social and

spatial restructuring, Liveable urban environment, Sustainable human settlements and to facilitate, coordinate and manage of development.

4.2.2 Question 2: Post 1994 Policies that addresses poverty, inequality & socioeconomic exclusion.

The panel identified the following policies as the most relevant policies in human settlement and more specifically in housing development. These include the NDP 2030, Spatial Planning and Land Use Management Act of 2013, Breaking New Ground Policy of 2004 Social Housing Act of 1998, Housing Act of 1997 and Reconstruction and the Development Programme (RDP) 1994.

The RDP of the White Paper of 1994, despite being known now as BNG policy the panel held it at high esteem. They pointed out that, like with any other policy the RDP had potential but did not achieve what it could have possibly achieved because there was not enough commitment to implement it. The policy had the potential to transform the spatial, social, and economic structure of the country, creating liveable and sustainable human settlements.

4.2.3 Question 3: Public Private Partnerships

The panel agree that PPPs play a significant role in development and they are important because they bridge the skills gap – skills transfer between the public and the private sector, they improve access to prime habitable land that is suitably located for housing development, provide funding (resources, skills, money, prime land) and the private sector contributes greatly in providing quality housing (vs RDP housing). In addition to these, the panel believes PPPs ensure quicker realization of the spatial and social transformation agenda, provide opportunities for different housing types, tenures, and housing finance. Lastly PPPs promote social optimization where integrated, inclusive, and diversified social incomes groups are catered for.

The diagram below illustrates the relationship between the public and the private sector in providing quality affordable housing.

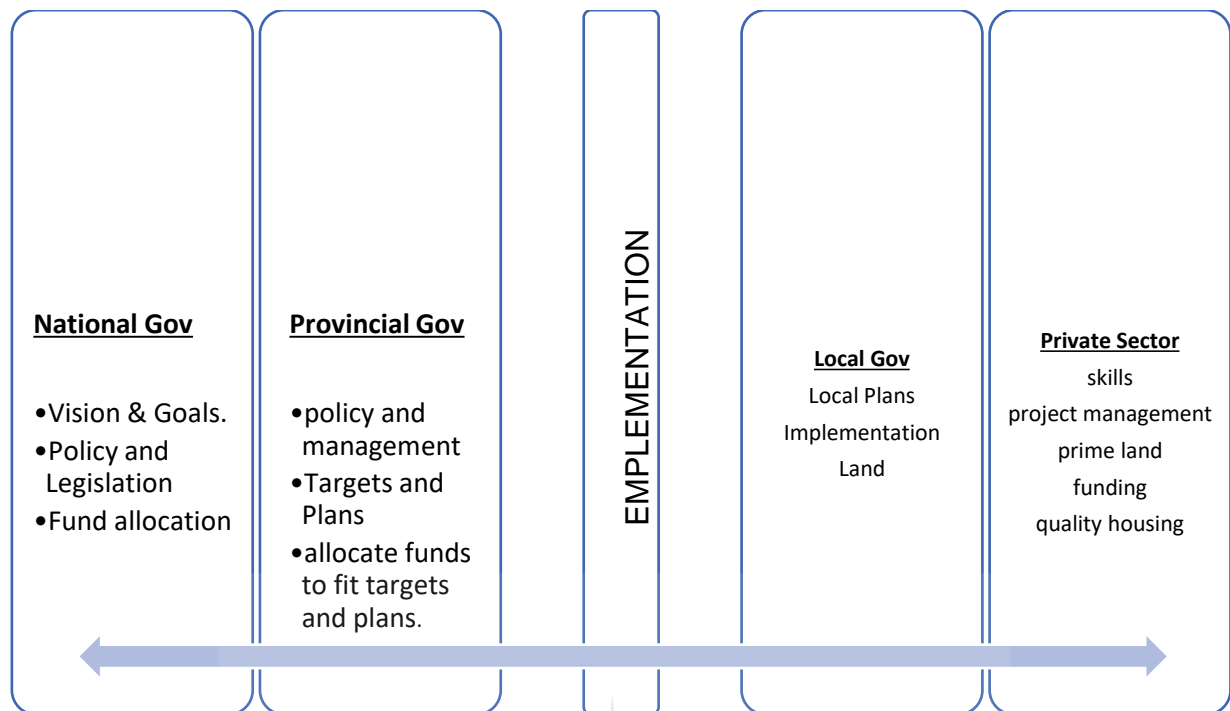


Figure 6: Housing PPP structure (Source: Authors data)

4.2.4 Question 4: Housing & Spatial Transformation

The panel noted that housing can bring about spatial transformation and community development by improving access to employment, basic services, amenities, liveable safe spaces, opportunities (social & economic) and improving access to social and physical infrastructure. This can be through the development of diverse & varying housing options, tenure, and housing opportunities. They note that to achieve spatial transformation public and the private partnerships are essential to firstly transform land ownership.

Planning housing developments for a Long-term sustainable community is important to restructure the spatial configuration of the city over time – creating well planned, resilient, self-sufficient, and looking beyond the here and now. The panel also noted that without social cohesion and integration of all stakeholders achieving spatial transformation would be a distant dream.

4.2.5 Question 5: Characteristics of an Inclusive Community

According to the panel an inclusive community is characterised by affordability (not developed exclusively for the poor or the rich), having diverse housing typologies, income groups, class, race and ethnicity living together and also having equal access to services and amenities and diverse transportation options. In addition to these characteristics an inclusive community must promote effective participation of different stakeholders in land

use and housing development. The respondents further noted that an inclusive community must contribute towards the economic emancipation of low-income groups and should foster social cohesion and sense of security.

4.3 Second Round Questionnaire

A summary of answers from all panellist in round 1 were used to formulate more specific questions that formed round 2 of the survey. The panel was requested to respond to these questions. These were measured as a total percentage of all responses in each question. They responded through an online platform known as Survey Monkey. This platform was used to ensure that experts did not answer more than once.

According to Varela, et al (2016) online platforms, specifically Survey Monkey are best suited for collecting data in a secure manner in the digital age. They assert that the platform *“has provided some positive aspects, such as: easier access, avoidance of input and data coding errors, a faster distribution and saving time and cost. However, some negative characteristics have been detected, for instance: response rates and the length of the questionnaire”* (Varela, et al., 2016, p. 78). The maximum of ten question length of questionnaire did not affect the study as the researcher already had a set of ten questions, of which could have been extended to more if the need arised. The response rates affected the study as the third round of the surveywas not conducted.

On a Delphi study conducted by Gill, et al. (2013), they used Survey Monkey and found the platform yielded higher response rates and data quality was improved in their study, the platform was also user friendly and made the process very efficient. It is however important to acknowledge that *“ethical review guidelines and processes have not yet kept pace with online research practices”* (Gill, et al., 2013, p. 3327) and this needs to be taken into consideration and the traditional research guidelines adapt to the changes in the digital world.

The mode of consensus is the percentage of panellist who agree and strongly agree to the statement or disagree and strongly disagree. According to Hsu & Sandford (2007) data analysis rules in a Delphi survey on how to measure the level of consensus are quite flexible and open to interpretation. The researcher decides what each range represents (Hsu & Sandford, 2007), this is also shared by Nworie (2011). For this study the researcher decided that if at least 60 percent of the panel agree and strongly agree or disagree and strongly

disagree on the five-point scale the assumption is that consensus has been achieved and thus, doesn't warrant further investigation. These two sides will be regarded as positive and negative consensus. Positive consensus is when +60% agree and strongly agree and negative consensus is when +60% disagree and strongly disagree.

There is a lot of recommendations of what consensus is in Delphi study, most of the decisions on which measure to use are influenced by the research aim, the sample and the number of respondents (Hassan, et al., 2000). Some scholars define consensus as having achieved at least 51% agreement (Loughlin & Moore, 1979), others 60% (Seagle & Iverson, 2002), 70% (Green, et al., 1999; Hsu & Sandford, 2007) and even 80% (Crisp, et al., 1997). The questionnaire was a five-point Likert scale. Thus, the researcher decided to use 60 percent as a measure of consensus just like the study conducted by Seagle & Iverson (2002).

According to the Survey I conducted over a period of a month (from 12 July 2019 to 12 August 2019) on SurveyMonkey the results can be summarised on the table below:

Research Question	Questionnaire: Questions/Statements	Consensus/Results	Conclusion
Question 1: What kind of communities are being currently developed and where, as it relates to housing development?	1.The City of Johannesburg (CoJ) has been creating affordable communities (affordable to different income groups) and inclusive communities (socially & economically) as it relates to housing development.	Positive consensus: $50\% + 18\% = 68.8\%$	Round 3 not required.
	2.The CoJ has been creating integrated communities (different stakeholders, land uses, housing options, public transport) as it relates to housing development.	Positive consensus: $48\% + 18,8\% = 62.6\%$	Round 3 not required.

Research Question	Questionnaire: Questions/Statements	Consensus	Conclusion
Question 3: What is the current normative framework (principles & norms) in housing and community development?	4.The prevailing principle in development planning in the CoJ is "socioeconomic and spatial integration".	Positive consensus: $56.3\% + 12.5\% = 68.8\%$	Round 3 not required.
	5.The general norm in housing development in Johannesburg is the support of affordable housing in well located areas with access to socioeconomic services.	No consensus: $18,8\% + 25\% =$ only 43.8% positively concur	Further investigation required
Question 4: Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?	6.CoJ housing policies have improved access to socioeconomic amenities, services, and infrastructure for low-middle income groups.	Positive consensus: $81,3\% + 6,3\% = 87.3\%$	Round 3 not required.
	7.CoJ housing development strategies have the potential to transform the spatial economy.	Positive consensus: $62,5\% + 25\% = 87.5\%$	Round 3 not required.
	8.Low-Middle income housing can significantly reduce poverty and inequality by providing access to secure land ownership to low-middle income groups.	Positive consensus: $25\% + 37,5\% = 62.5\%$	Round 3 not required.
Question 5: What is the impact of the current participation procedure in housing policy and development?	9.The policy and legislation of the city is enough to ensure that all stakeholders effectively participate in housing development.	No consensus: $37,5\% + 18,8\% =$ only 56.3% positively concur	Further investigation required
	10.The public participation framework and process provide meaningful engagements in housing development as the City objectively considers all representations in a public participation process.	Positive consensus: 63%	Round 3 not required.

Table 5: Summary of round 2 responses

Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)

(This is based on a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019).

4.3.1 Question 1 & 2: What kind of communities are being currently developed and where, as it relates to housing development?

The data series on the graph below represent the following questions/statements of the survey which relates to question 1 of the study: Series 1 represent question/statement 1 and Series 2 represent question/statement 2.

- *Statement/question 1: The City of Johannesburg (CoJ) has been creating affordable communities (affordable to different income groups) and inclusive communities (socially & economically) as it relates to housing development.*
- *Statement/question 2: The CoJ has been creating integrated communities (different stakeholders, land uses, housing options, public transport) as it relates to housing development.*

Both these represent the kind of communities that are currently being planned and developed in the City of Johannesburg.

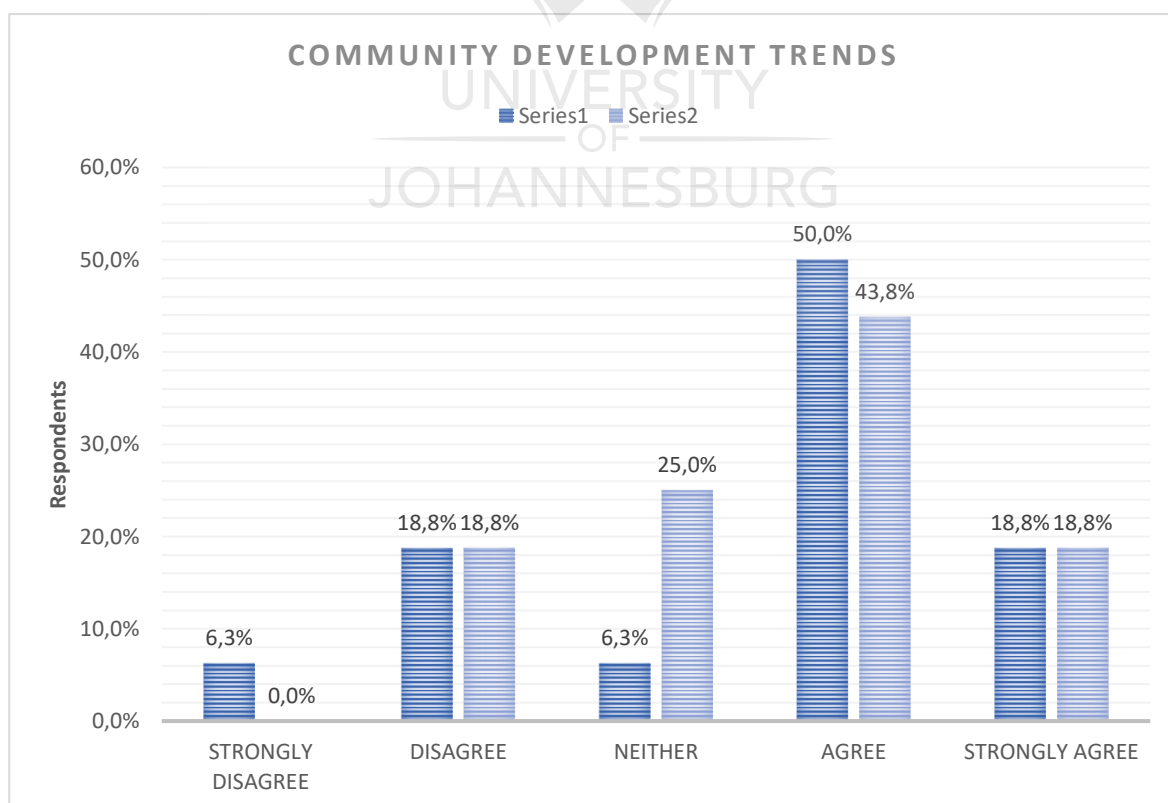


Figure 7: Question 1 response graph - Community development

Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)

Based on the survey I conducted between it is evident that 68,8% of the panel concur that the City of Johannesburg has been creating affordable communities (affordable to different income groups) and communities that are inclusive both socially & economically as it relates to housing development. While 62.3 percent concur that the City of Johannesburg has been creating integrated communities through the involvement of different stakeholders, diversifying land uses, housing options and transportation options where housing is being development.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019: Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)).

4.3.2 Question 3: What are the socio-economic opportunities that comes with low-middle income housing development?

When asked what the socio-economic opportunities that comes with low-middle income housing development are, the panel stated that:

- It provides the opportunity for home ownership by the working poor which also contributes to their assets, economic integration and improves the quality of people's lives across all income groups. Low income groups can enter the property market that they would otherwise never afford.
- Housing development in close proximity to socio-economic opportunities is maximised, creating diverse housing opportunities, promoting cultural diversity and spatial and socio-economic sustainability where urban regeneration, urban infill development is promoted.
- Access to education, amenities such as clinics, parks, and eradication of poverty through access to social and economic opportunities is made possible.
- It improves livelihood strategies through access to resources to make a living.
- There is an opportunity to curb urban sprawl while dealing with the housing backlog that exists in the city.
- Provides local economic development and employment opportunities through SMME construction phase and CIBD opportunities for SMME including LED for community and skills transfer.

- Low income household have the opportunity to have access to sustainable public transport systems, people get to live close to where they work and enjoy improved access to amenities which improves their general well-being.
- It promotes social cohesion and Integrated human settlement, where a diversity of people lives and work together.
- It encourages inclusiveness.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019: Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)).

4.3.3 Question 4 & 5: What is the current normative framework (norms and principles) in housing and community development?

The data series on the graph below represent the following questions/statements of the survey which relates to question 3 of the study: Series 1 represent question/statement 4 and Series 2 represent question/statement 5.

- *Statement/question 4: The prevailing principle in development planning in the CoJ is "socioeconomic and spatial integration".*
- *Statement/question 5: The general norm in housing development in Johannesburg is the support of affordable housing in well located areas with access to socioeconomic services.*

Both these represent the focus of the development framework of the CoJ.

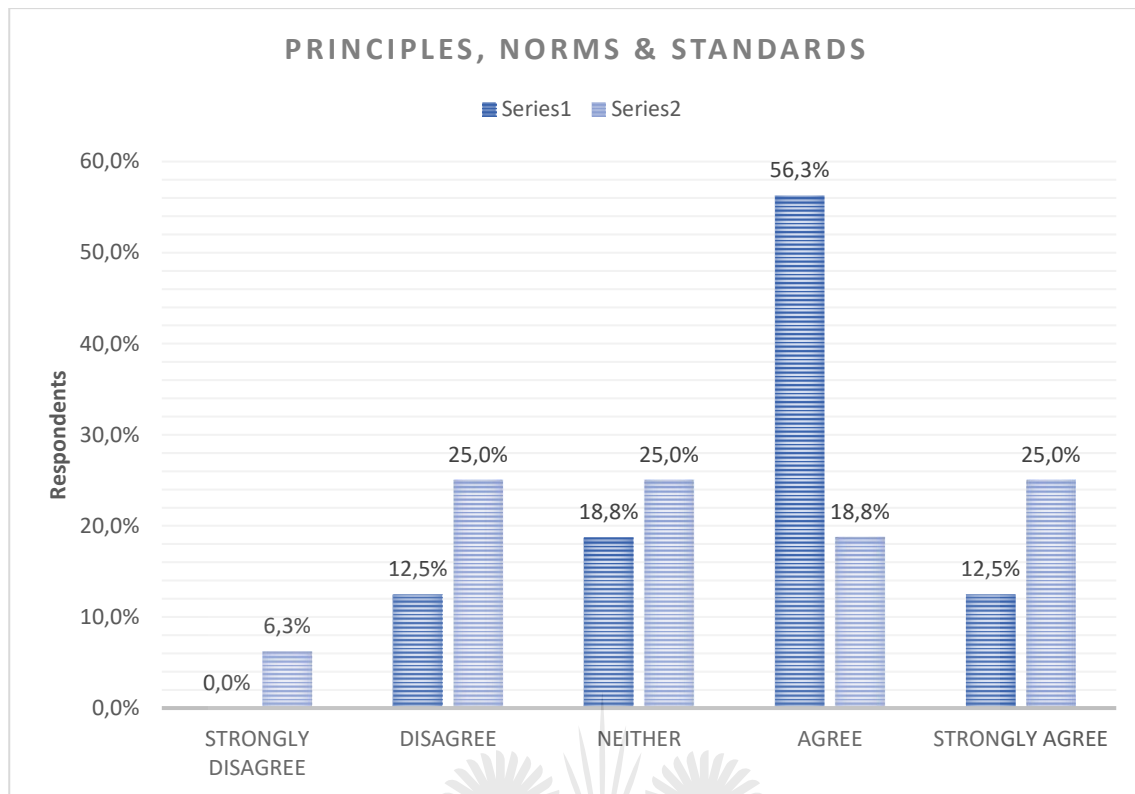


Figure 8: Question 3 response graph - Normative framework

Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)

The survey revealed that 68.8% of the panel concur that the prevailing principle in development planning in the CoJ is "socioeconomic and spatial integration". Consensus was not reached on the statement that the general norm in housing development in Johannesburg is the support of affordable housing in well located areas with access to socioeconomic services. 43.8% positively concur while 31.3% negatively concur and 25% neither agree nor disagree. The substantiations are that a lot of housing development continue on the periphery of the city despite the interventions to promote the opposite.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019: Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)).

4.3.4 Question 6,7 & 8: Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?

The data series on the graph below represent the following questions/statements of the survey which relates to question 4 of the study: Series 1 represent question/statement 6, Series 2 represent question/statement 7 and series 3 represent question/statement 8.

- *Statement/question 6: CoJ housing policies have improved access to social and economic amenities, services, and infrastructure for low-middle income groups.*
- *Statement/question 7: CoJ housing development strategies have the potential to transform the spatial economy.*
- *Statement/question 8: Low-Middle income housing can significantly reduce poverty and inequality by providing access to secure land ownership to low-middle income groups.*

These data series represent the focus of the strategies in addressing poverty and equality in the CoJ.

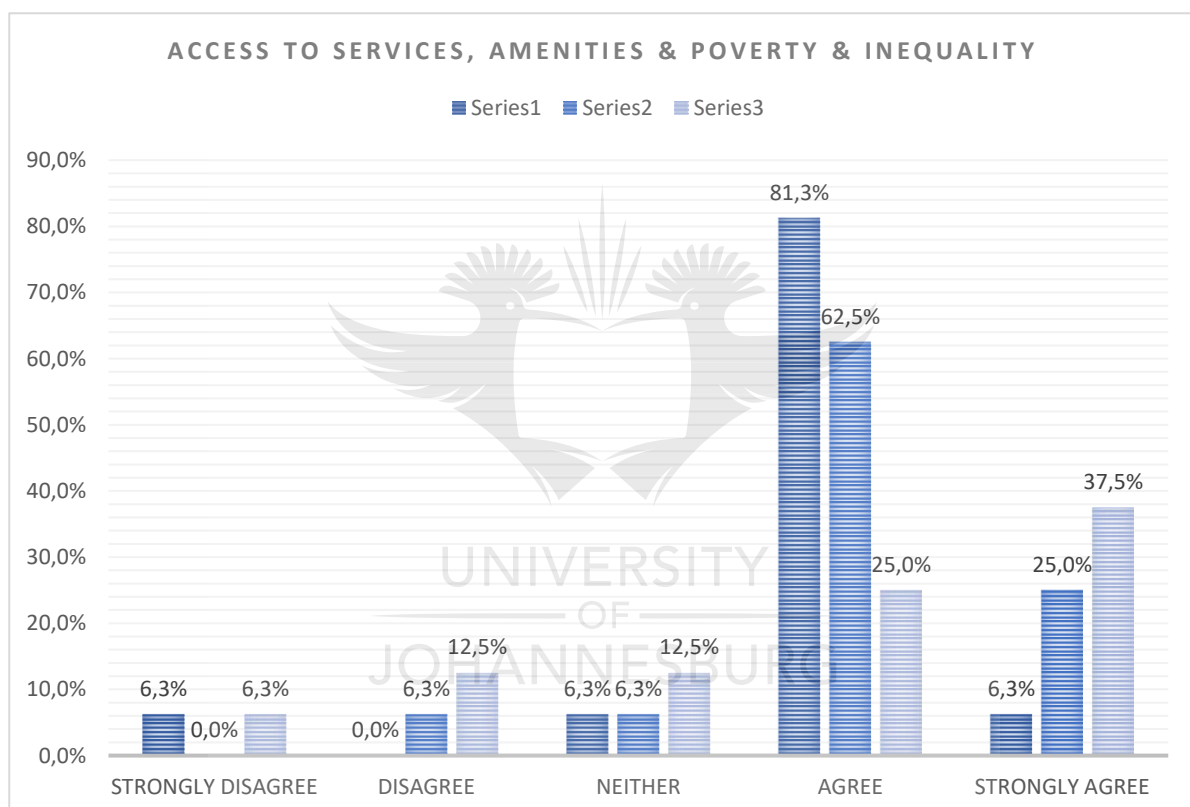


Figure 9: Question 4 response graph - poverty & inequality

Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)

87.3% of the respondents positively concur that the housing policies of the CoJ have improved access to social and economic amenities, services, and infrastructure for low-middle income groups. 87.5% Positively concur that the housing strategies of the CoJ have the potential to transform the spatial economy and 62.5% positively concur that Low-Middle income housing can significantly reduce poverty and inequality by providing access to secure land ownership to low-middle income groups.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019: Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)).

4.3.5 Question 9 & 10: What is the impact of the current participation procedure in housing policy and development?

The data series on the graph below represent the following questions/statements of the survey which relates to question 5 of the study: Series 1 represent question/statement 9 and series 2 represent question/statement 10.

- *Statement/question 9: The policy and legislation of the city is enough to ensure that all stakeholders effectively participate in housing development.*
- *Statement/question 10: The public participation framework and process provide meaning engagements in housing development as the City objectively considers all representations in a public participation process.*

These data series represent the effectiveness of the participation process in the CoJ.

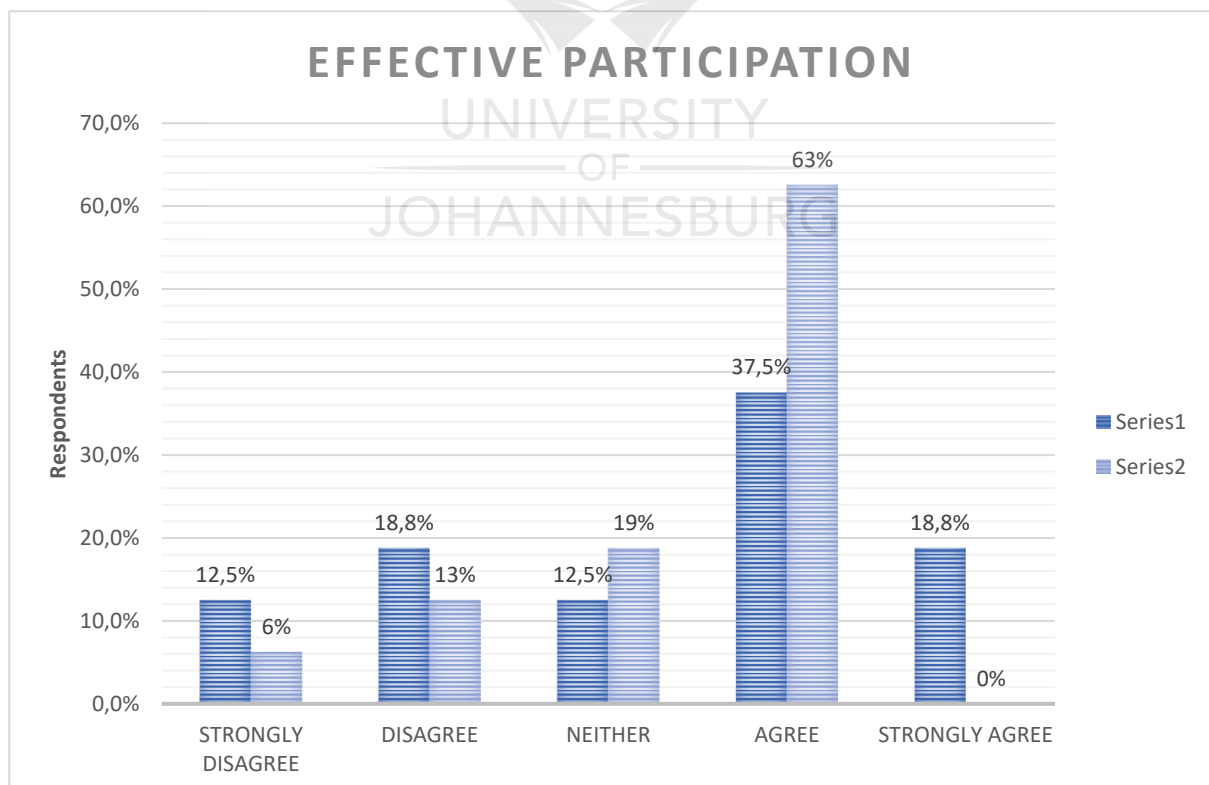


Figure 10: Question 5 responses - Effective participation

Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)

56.3% of the panel positively concur that the policy and legislation of the city is enough to ensure that all stakeholders effectively participate in development in the city. This is the sum of those who strongly. While 31.3% negatively concur, they assert that the city as much as it ensures that there is participation, more can still be done to ensure that it is a fruitful process. 12.5% of the respondents are undecided.

63% of panel positively concur that the public participation framework and process provide meaningful engagements in housing development as the City objectively considers all representations in a public participation process. While 19% negatively concur, they assert that the city as much as it ensures that there is participation, the views of the participants are often overlooked, meaning it doesn't effectively engage with the issues as raised and doesn't objectively consider these issues; it is just another process that gets done, a box to tick and move along.

19% of the respondents are undecided. Stating that there is no evidence to support that there is effective participation in the development process and there is no proof that the is not. the process takes place yes, but the outcomes do not necessary reflect that most of the issues raised during this process have been addressed.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019: Source: Authors Findings 2020 (<https://www.surveymonkey.com/r/P9C8BG2>)).

4.4 Interviews

4.4.1 Opportunities

The residents were asked whether they have reasonable access to social facilities and amenities (education, health, safety and security, recreation). 70% of the residents said yes, they have reasonable access to social facilities and amenities, while 30% said no they do not have reasonable access. They highlighted that quality is a factor; as they can't regard it reasonable nor adequate if the quality is still compromised (Residents, 2019).

When asked if they have access to economic opportunities (something that can make them a living including infrastructure and transportation), 56% of the residents said yes, they do while 44% said no, citing the poor public transportation systems. This makes it costly for them to even run a small business and commuting to and from work is a bit of hustle (too

much traffic to economic hubs, at times they have to take two taxis). 3 of the respondents said they would consider using a train if one existed from their site (Residents, 2019).

An average of 63% of the respondents are positive about the opportunities that the developments they live in have provided while 37% are not very positive.

4.5.2 Effective Participation

When asked if they participate in development in the area, 64% of the respondents said no, they do not while 36% stated that they do. Majority of the 64% stated that these public participation processes are a waste time and they take place in days and times that are not convenient for them. It is as if there is a deliberate effort to avoid addressing the disagreements that may arise and less effort in insuring that everything is addressed (Residents, 2019b).

When asked if their views are valued during public participation meetings, 60% of the respondents said no while 40% said yes. Majority of the 60% who said no are those who do not participate in the public participation process anymore because of the same reasons cited above. Few of the 40% that said yes, their views are valued; said that if they participate at least they can be instrumental in deciding how the development looks. As much as they cannot change some aspects of the development that are provided for in the policy of the City, they can at least influence the orientation of the development (Residents, 2019b). An average of 38% of the respondents feel positive about the public participation process while an alarming 62% feel very negative about the process and its outcomes.

(This information is according to a student survey conducted by V.K Baloyi (ROUND 2 QUESTIONS: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa., between 16 July to August 12, 2019).

4.5 Documents

The data collected from the documents was for the purpose of finding out what the normative framework is. This is to mean the principles that guide development. The table below is the sum of all the information gathered from 7 policy documents found relevant to this study.

What is important to note is how this information has a significant link to the question about the role of policy posed to the panel in the first round of the survey. The main principle which drives all the norms and standards in housing development is spatial in all aspects, it

responds to space and how it functions and should function; it is Spatial integration, spatial sustainability and spatial resilience and so forth. This in policy can be traced back to need to restructure and address apartheid spatial planning which can be attributed to a lot of problems in SA cities. The other principle is accountability for the vulnerable, which is reflected in pro poor development advocated by the CoJ IDP 2018/19.

Policy	Normative framework (Principles that drive the norms and standards)
NDP 2030	<ul style="list-style-type: none"> • Spatial justice, sustainability, resilience, quality, and spatial efficiency • Spatial restructuring*
SPLUMA no. 16 of 2013	<ul style="list-style-type: none"> • spatial sustainability, efficiency (resource), transparency (good governance), spatial resilience and spatial justice. • Spatial restructuring*
National Housing Act no. 107 of 1997	<ul style="list-style-type: none"> • Protection of the vulnerable*, participation, transparency, Choice – options – tenure options • Integration, sustainability, affordability, and adequate housing.
Breaking New Ground 2004;	<ul style="list-style-type: none"> • PPPs, Quantity vs quality, Options – tenure options and location – well located housing • Managed to change the property landscape - Land Transformation
Social Housing Act no. 16 of 2008	<ul style="list-style-type: none"> • Protection of the vulnerable* (children, women, disabled, elderly), Participation, Integration (housing, economic, social & physical) and Developing socially and economically viable communities. • Expand finance options to improve access

<i>Johannesburg SDF (2040) 2016 + Inclusionary Housing Policy 2018;</i>	<ul style="list-style-type: none"> • Compaction, inclusivity, connectedness, resilience and Generative. • Change the city structure – spatial restructuring*. • The strategy is in 5 ways, consolidation of well-established areas, moving development away from deprived areas, creating an integrated system of the city's natural features and to transform already existing, well establish urban areas. • This aims to optimise opportunities, services, and the potential of the city. Creating enclaves of opportunities instead of enclaved of poverty.
<i>Johannesburg IDP 2018/19.</i>	<ul style="list-style-type: none"> • To create an economically conducive environment by being more responsive in providing quality services. • Address poverty, inequality and provide meaningful redress by promoting pro-poor development.

Table 6: Normative framework (development principles)

Source: Authors Findings 2020

The documents also provided further clarity with regards to the support of development in desirable locations. A question that required further investigation from the second-round survey question 5, which the panel failed to reach consensus. Three policies of the city reveal that the city has in place policies and strategies to promote housing development in strategic locations. The Regional Development Framework (RSDF) 2010/11 introduced nodal development to ensure that people are located in the right places, the Corridors of Freedom introduced a Transportation Oriented Development (TOD) approach to development, the SDF 2040 reinforced nodal development and the TOD approach. These policies go far back and have been in place for close to 10 years. This can be supported by the spatial analysis of the four study sites as set out in the next paragraphs.

4.6 Observations and Spatial Analysis: Community development, location, and socio-economic opportunities

The city and its private sector partners have been developing integrated communities in areas with access to social and economic infrastructure in the past 10 years. The Cosmo City, Fleurhof, South Hills and Casa Mia developments are four projects that are encompassing of a city revitalisation project, green development, and infill development. All these developments provide for a variety of income groups as per the needs of the city from as little as R800 per month. Below is the spatial depiction of the information obtained from observations and spatial analysis (also refer to annexure 7 for further information on all developments and also note that the set of plans in this section are not drawn to scale).

4.6.1 Fleurhof development

The Fleurhof development is located along Main Reef Road, a major economic route in Region C, which connects the inner city to the south. The main economic area is along the Road and in the surrounding. These include Roodepoort, Industria, Stormill, Robertsville, Lea Glen and Rand Leases. There are several mines as well in the area that are both operational and closed.

There is public transport running along Main Reef Road, which is inclusive of both Metro Bus, ReaVaya and minibus taxis. The site is also in close proximity to the train station in Florida and Roodepoort.

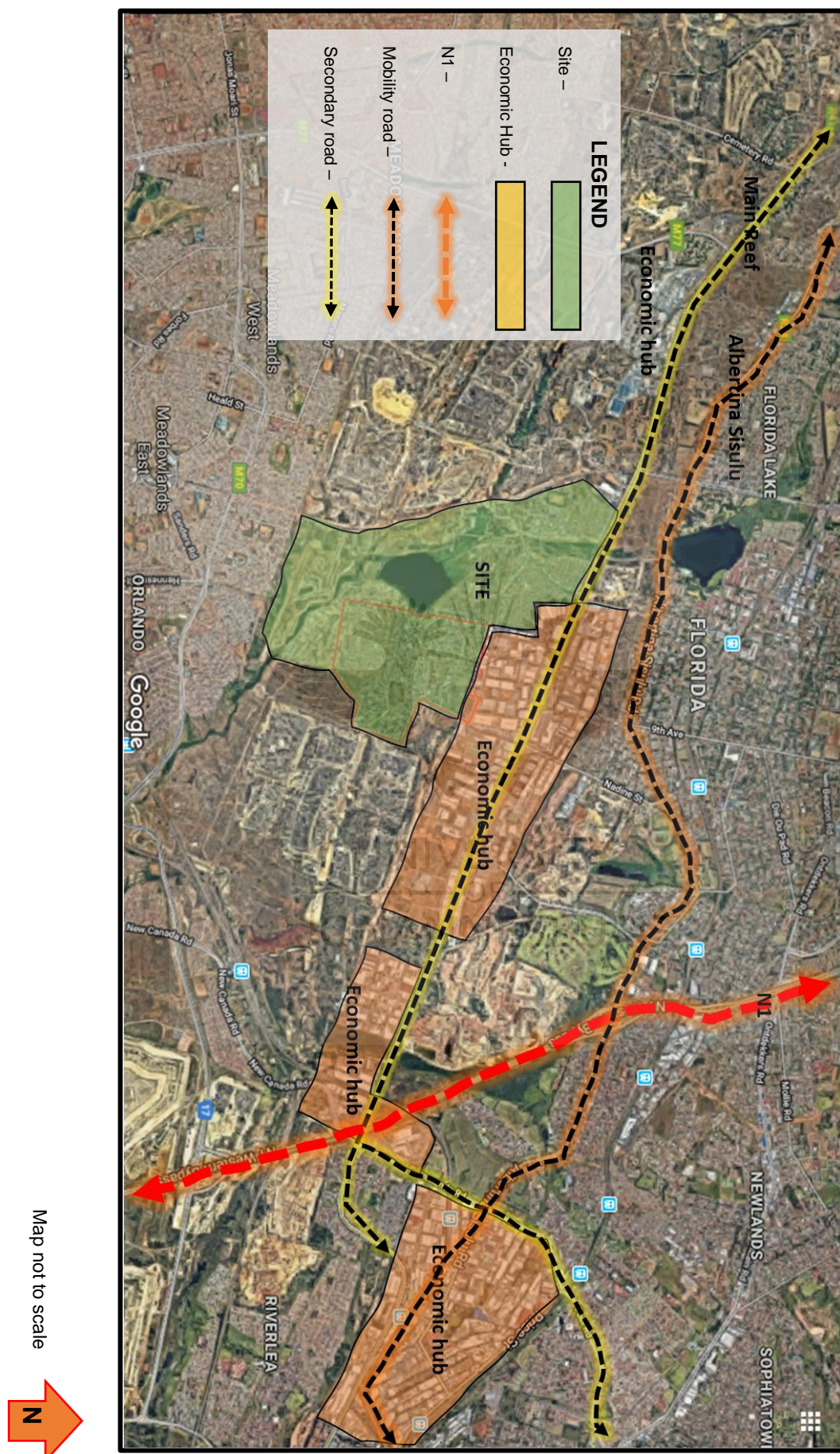


Figure 11: Fleurhof and Surrounding Area

4.6.2 Cosmo City development

The Cosmo City development is situated along major routes with access to at least three major economic areas in the Region, Kya Sands, Fourways, and Northgate node. The public transport system is made up of Metro bus and minibus taxis. There is no train or ReaVaya. However, the development has considerable access to social infrastructure such as schools, clinics, and police station.

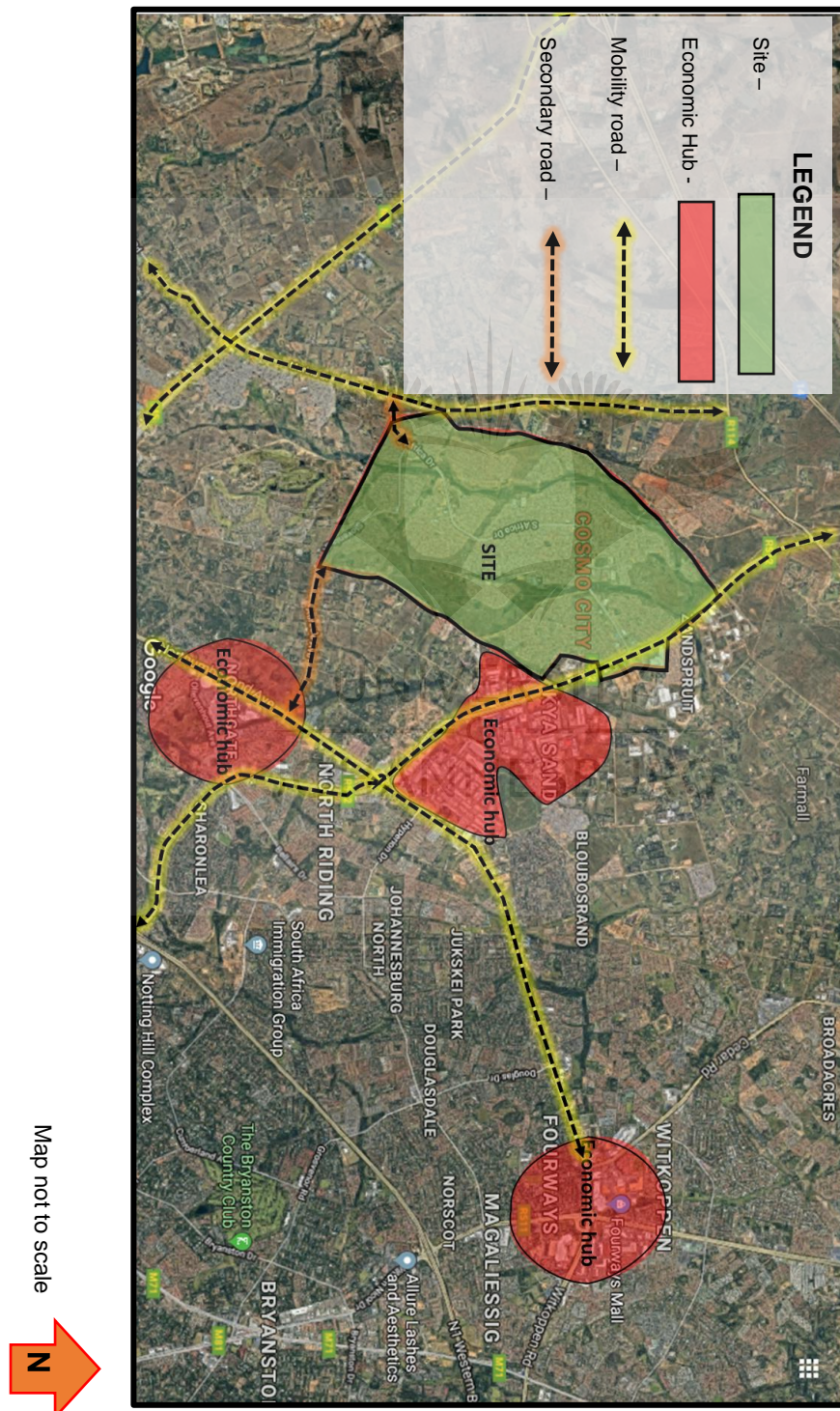


Figure 12: Cosmo City and surrounding

4.6.3 South Hills development

The South Hills development is located along a major route and an identified Corridor of Freedom (Turffontein Corridor). The main economic area is Tulisa Park which is an industrial area. The site is in proximity to various social amenities inclusive of schools. This residential development is within an established residential area with existing services that it can connect to. Refer to Annexure 4 for further reference to the services available in the area and surrounding.



Figure 13: South Hills and surrounding area

4.7 Conclusion

The data gathered and recorded in this chapter was collected from an expert panel, residents, documents and through observations and spatial analysis. Analysis of the results yields a conclusion that a reasonable level of agreement exists within the panel. A very low level of consensus exists regarding the norms and standards, more specifically on the norms around the location of housing development in the city and also on effective participation.

The data reflect that 68% believe the city is creating affordable communities, the spatial analysis shows where these communities are located and accessibility to social and economic amenities and facilities. The panel also indicated that the city is creating integrated communities. The policy supports this and so is the spatial analysis.

The data also indicate that there are plenty of opportunities in developing low-middle income housing. These include improving the structure of the city, people's lives, and their general social and economic well-being. It also reflects that the recurring and mostly upheld principle is spatial, that is spatial integration, sustainability, inclusivity and so on. But, despite this, the expert panel revealed that housing is still being encouraged in undesirable locations with limit access to socio economic services and amenities which is contradictory to the principle. This was revealed in one of the four sites; Cosmo City seems to be a bit isolated compared to the rest.

In general, the second-round survey achieved a sufficient level of consensus thus not warranting the third round. However, the statements with low level of consensus warranted further investigation which was carried out on documents, resident interviews, and observations.

CHAPTER 5: DISCUSSION, CONCLUSION & RECOMMENDATIONS

5.1 Introduction

The previous section is a review of the responses and all the data gathered to address the research questions listed in the first chapter. The section also addresses the results. The aim of this chapter is to focus on the research questions and objectives as outlined in Chapter 1, in terms of the literature review and research findings in chapter 2 and 4. In addition, the chapter includes a discussion of the results and makes recommendations based on this information. It also provides the full analysis with the conclusions.

2.7.1 Research questions, aim and objectives of the study

The aim of this study was to investigate the role of low-middle income housing in creating socially and economically inclusive communities. This is to understand the underlying challenges and opportunities in transforming South African communities and to understand and plan for better and more socially and economically inclusive communities through PPPs low-middle income housing developments. The following sub-questions for the research were formulated to provide answers to the above and have aided in achieving the objectives of the study which are outlined in the first chapter:

1. What kind of communities are currently being developed and where, as it relates to housing development?
2. What are the socio-economic opportunities that comes with low-middle income housing development?
3. What is the current normative framework (principles) in housing and community development?
4. Does the current strategy and approach in affordable housing policy and development adequately address poverty and inequality?
5. What is the impact of the current participation procedure in housing policy and development?

2.7.2 Methods and approach

The research methodology used (as described in chapter 3) was that of a qualitative inquiry. The specific design chosen was a case study of the CoJ, with four study sites. Multiple data collection methods were used. The primary method was a Delphi Survey, then interviews,

documents, and spatial analysis. The analysis methods were also multiple in accordance with the collection methods.

Evaluating this design after the study found that it was the best methodology chosen for this study. The main reasons being that, the data collection strategies were extensive to gather data from vast data sources, the panel of experts was diverse, and the resident respondents provided a view to improve the validity of the study.

5.2 Discussion of findings

Johannesburg has been characterised by enormous social and economic exclusion of the poor, the working class and the vulnerable for the longest time even after the systematic exclusion was abolished in 1994. This is reflected in the city's structure, the movement patterns, and the location of people and also how people negotiate their survival daily. This makes it an important matter to understand how the past decades has turn the tide against exclusion from social and economic opportunities, from engaging in social and economic development and leveraging any resource available to get out of poverty. The paragraphs below discuss the findings of the study as set out in the previous chapter by answering the questions posed in chapter 1 of the study.

5.2.1 Housing and community development

It has emerged that the city is and has been for years promoting and creating affordable, inclusive, and integrated communities. Through their SDF 2040 and their now outlawed Regional Spatial Development Framework 2010/11 policies, they have been pushing this agenda as the City believes it is key to sustainability. Their pro poor agenda has ensured that low-middle income groups are located close to social and economic amenities through the development of low-middle income housing in close proximity to these services.

The housing developments are integrated both socially and economically, allowing the residents better access to social and economic services, amenities, and facilities. This allows the poor and vulnerable, people who would otherwise never realise living in these areas because they cannot afford it, to live in well-established communities. But, very often most of these developments end up very expensive for the intended beneficiaries to live in. The Fleurhof development is one such development where people earning above R7500 ended up living in the development pushing out those earning between R3500 and 7500 out of the market.

However, most of the development happening in the city are well coordinate to correspond with the vision of the city of an inclusive city. Casa Mia building is an example of several buildings that the city is refurbishing to provide low cost housing. The other three developments cater for a need in other areas other than the city centre. Located along major routes, they improve access to social and economic needs, improving people's livelihood strategies.

Clearly housing can do more than provide a roof over the head, it can protect the dignity of people and improve their general wellbeing. Specifically, low-middle income housing can improve the spatial economy and the relationship between people and space. Where people live and work is a great determinant of the social dynamics of a city which in turn determines its functionality.

The communities that are currently being developed in the city are driven by both private and public sector investments. Making PPPs the best and suitable low-middle income housing delivery mechanism. The public provides a suitable environment for private sector to develop through ensuring availability of services and promoting development where there are services through policy mechanisms.

In the effort to integrate different income groups, different housing tenures and typologies are used. This has resulted in communities that are diverse and rich in culture which goes a long way in creating a close neat community. This is also evident in strictly private housing developments and through the Inclusionary Housing Policy aims to ensure that low and middle-income groups are catered for in private residential developments that would otherwise be developed exclusively for the rich

5.2.2 Socio-economic opportunities of low-middle income housing

Housing is a crucial socio-economic aspect of development (Henilane, 2016). In terms of the SDGs, it is one of the basic human needs and imperative to sustainable development (Willis, 2016). It has emerged from this study that there are plenty of opportunities in developing low-middle income housing. These include improving the structure of the city, people's lives, and their general social and economic well-being.

According to Michael Pacione (2009) housing is a basic human right; and it cannot be regarded as a mere consumer assert (Pacione, 2009). It is a transformative tool in making a community work, a city work, and a country work. The study has revealed that developing

diverse and varying housing options and opportunities can improve access to basic services, amenities, liveable safe spaces, opportunities (social & economic), social and physical infrastructure.

In developing long term sustainable communities housing can go a long way in restructuring the spatial configuration of the city over time – creating well planned, resilient, self-sufficient cities, looking beyond the here and now. These opportunities can be maximised through the involvement of different stakeholders. The transformation agenda which is very important to the sustainability and inclusivity agenda; and can only be realised through PPPs because together they can transform land ownership which improve access to other social and economic assets for millions of people that are currently economically marginalised.

An inclusive community is characterised by affordability (not being developed exclusively for the poor or the rich), having diverse housing typologies, having equal access to services and amenities and diverse transportation options. This presents a great opportunity for low-middle income groups to be economically emancipated through access to means that can drastically improve their quality of life and their general social and economic wellbeing.

Compact, mixed use and affordable developments are arguably the ideal development for creating better living spaces. First, they promote better thriving communities as they create a greater variety of activities, amenities, work, and leisure in close proximity to each other. Secondly, they are economical comprehensive as they promote affordable urban housing, reduces the cost of living through reduced travel cost, maintenance, and expenditure cost. Third, the infrastructure can be offered cost effectively per capita in a more compact inclusive urban environment. This promotes sustainability, social equity, and integration in the urban fabric.

5.2.3 Housing and community development normative framework

It has been revealed that the prevailing principle in housing and development in general is Spatial. The location of people and supporting amenities is of paramount importance. Housing development is key to ensuring people are at the right place to support the social and economic functionality of the city.

Policy provides a blueprint of what is intended and how it can be achieved. The principles identified through this research are intended to guide development and decision-making processes to achieve Spatial integration (transformation), Social and spatial restructuring,

to create liveable urban environments, Sustainable human settlements and to facilitate, coordinate and manage development.

The emphasis is on space, how people and business negotiate their social and economic wellbeing within space. Most of the principles are still not being fully embraced and put into practice in a manner that can affect significant economic and social inclusion. Like the RDP policy, it had the potential to transform the spatial, social and economic structure of the country, creating liveable and sustainable human settlements, but become a fruitless experience with focus on housing quantity instead of quality living spaces.

One of the main principles in the city, which is a key driver in the Fleurhof, Cosmo City, South Hills and Casa Mia Development is ***spatial integration***. This means diverse urban form, structure, uses, housing options and overall diversity in development. This principle has potential to resolve urban inefficiencies as identified in the NDP and in the Johannesburg SDF 2040. It can achieve the promotion of land development in locations that are sustainable and limit urban sprawl; and optimise the use of existing resources and infrastructure as entrenched in SPLUMA 2013 and the Johannesburg SDF 2040.

5.2.4 Strategies in addressing poverty and inequality

De Soto (2001) argues that poverty is a result of lack of access to collateral asserts which have the potential to eventually increase wealth. Most people are excluded from accessing housing by the capitalist development process, those who afford get those who does not well they do not get anything. However, the economic system is just that a system, that can be improved to work towards inclusive development.

Chambers (2006) argues that poverty is multidimensional (Chambers, 2006). Understanding the causal elements that underly poverty and inequality goes beyond academic significance, since policy makers determines response to poverty and inequality. It can be noted that poverty in South Africa is multidimensional as asserted by Chambers and Pacione, it is caused by institutional malfunction which has to do with failure to plan and manage, maldistribution of resources and opportunities. This manifest itself in the inequitable distribution of resources and also structural class conflicts which are divisions that exist to maintain the economic system. All these manifests in the relationship between the disadvantaged, the underprivileged, the working class, Bureaucracy, and the political and

economic structures. This combined affect the economic and social fabric of the country and its cities.

There is no argument that housing is an asset. Thus, a successful housing intervention can do much to reduce poverty. It can dramatically expand a low-income household's asset base and improve general wellbeing. This study has revealed that the City's housing development strategy is transformative, and housing developments provide opportunities for secure tenure to low and middle-income households by providing a variety of tenure options. People who don't have any means at all can own houses through the social housing provision, some can own housing at a low cost through the FLISP/Gap housing provision and those who don't intend to stay in one area also have the opportunity to rent at a low cost through the BNG rental housing. There is option and choice in these housing developments for low and middle-income households to own properties and expand their asset base.

The transformative nature of the city's strategies and approach has resulted in low and middle-income households moving closer and closer to social and economic opportunities, to better transportation infrastructure and services, access to better schools and employment opportunities. All these go a long way in addressing issues of inequality. In an environment where all income groups have access to the same services, the gap between the rich and the poor in terms of access to social and economic services is reduced.

The need for relatively higher density land uses and affordable housing, especially in close proximity of major employment nodes, is becoming more and more significant due to various reasons, mostly entrenched in the sustainable cities' global development agenda. It is in the interest of the poor and marginalised to provide affordable residential properties where there is already an existing infrastructure, complimentary uses, and social facilities. This creates liveable neighbourhoods and stewardship between the government and the public in the efficient and proper management of the city's resources, which consequently result in the provision of quality services cost effectively per capita to both the rich and the poor.

It is notable that, the strategies and approaches in the city has been to encourage development in close proximity to social and economic amenities, services, and infrastructure. From the RSDF 2010/11 to the SDF 2040 (approved in 2016) and the recently approved Inclusionary Housing Policy 2018; the strategy has been upheld consistently over time. The four-study site are located in strategic locations, in transportation nodes and

economically viable areas, which improves access to basic services, consequently reducing vulnerability to poverty.

5.2.5 Effective participation

The constitution of the Republic of South Africa, 1996 clearly articulate the need to enhance participation of the community in matters that shape their realities. The participation process plays a meaningful role in addressing people's realities. This study has revealed that the participation process as envisaged in the CoJ policies has generally not met expectations of both the community and the to a certain extent the policy makers, the expects. There is still a great deal of apathy.

The strategies and policies in the CoJ are pro-poor, aiming to eradicate poverty through the provision of quality basic services and moving people closer to social and economic opportunities. How this translates in practice has more to do with participation of different stakeholders to ensure the full realisation of the aim, vision and objectives of these policies and strategies.

Housing policies and strategies play a vital role in creating inclusive communities and effective participation is an essential part of that process, more especially the inclusive development process, which is key to creating inclusive communities. Housing development can achieve inclusivity if all stakeholders meaningfully and objectively engage to improve the development process and its outcomes and not discourage participation. In Johannesburg, this process is still lacking and as such housing development is not contributing effectively to the inclusivity agenda when it comes to effective participation as most stakeholders are not participating effectively.

Communities have to be involved, to be consulted in an organized fashion, on processes of development to be responsive and influential to their experiences and in order for development to resolve their realities. Ensuring that communities are engaged in local policies, planning, and any decisions that affect them is crucial.

5.3 Conclusions

The purpose of this study was to investigate the role of low-middle income housing in creating socially and economically inclusive communities. This is to understand the underlying challenges and opportunities in transforming South African communities and to understand and plan for better and more socially and economically inclusive communities through housing development.

The research specifically investigated the principles of an inclusive community as stipulated in the SDGs and highlighted by Gupta & Vegelin (2015). This is whether the principle of effective participation, sharing in development opportunities and protection of the poor are being achieved in low-middle income housing developments in the City.

Based on the five questions asked in chapter 1 of the study the following conclusions can be made:

The kind of communities currently being developed are integrated and located in proximity to social and economic amenities. As discussed, and illustrated above, these developments are located in major route, access to localised and regional economic hubs, social and economic facilities and with access to all basic services. These developments are integrated to the larger urban area and with linkages to the city centre.

The socio-economic opportunities that comes with low-middle income housing development include access to social facilities, employment opportunities, it lowest the cost of living by reducing the distance between home and work and increases their chances for secure tenure and also improves the general wellbeing of low middle-income groups.

The current normative framework (principles) in housing and community development prioritises the principles of maximizing the spatial potential of the city to achieve sustainable development and the spatial restructuring and integration of the city to address inequality and poverty.

The current strategy and approach in affordable housing policy and development adequately address poverty and inequality by bringing low middle-income groups closer and closer to social and economic amenities, facilities, basic services and infrastructure in well-established areas through the city's pro poor and service delivery driven policies. Policies

and strategies are strongly focused on improving ownership opportunities through a diversity of tenure options and through the general policy provisions that are pro poor.

The impact of the current participation procedure in housing policy and development it is found to be minimal, more especially to the residents that are more likely to be affected by the development; even those who may potentially be beneficiaries of the housing development. There is currently no effective participation of different stakeholders in a manner that is reflective in the outcomes or output of the development. Considering the above the participation of the private sector is core to achieving inclusive communities through housing development. They provide the skill and resources essential to developing good, quality, and affordable housing stock.

The City of Johannesburg low middle-income housing development are inclusive in two of the three ways referred to as principles of inclusivity. Opportunities existing in these developments and by virtue of living in the development these opportunities are shared amongst the residents and the surrounding area. Pro poor principles and policies ensures that the poor and vulnerable are considered in development and more specifically in ensuring access to basic services. These developments are taking people from places without access to water, sanitation and electricity and placing them in dignified communities where they can properly negotiate their living. These developments are lacking in one principle, effective participation is proving difficult even though it is a legal requirement. As much as it is enforceable, its effectiveness is however unmeasurable which has resulted in it being a mandatory tick box process.

5.4 Implications for practice in achieving inclusive communities in Johannesburg

The study has revealed that there are gaps in practice in all the three principles of inclusive development. The principles of effective participation, sharing of development opportunities and the protection of the poor, through addressing poverty and inequality (which focusses on access to services). With regards to effective participation – there is still a huge gap that needs to be filled. The current process is not working to the best of its potential. More needs to be done in ensuring that the public participation process result in positive real outcomes; where people feel heard and their views considered and not just a tick box process for the City.

Effective participation must also mean that the private sector can come to the party in implementing the policies that aim to create inclusive communities, like the Inclusionary Housing Policy, 2018 instead of pushing a different agenda on the side-lines. If more developers participated effectively on this agenda, the City will be significantly transformed. The City can push more policies that will ensure that low-middle income groups have access to quality services in a manner that can help them provide for their own housing needs. Because inclusive communities are the best mechanisms in addressing poverty and inequality as they place people at the right places with the right resources.

The participation process is key in creating inclusive communities, it determines how opportunities are shared and how poverty and inequality can be addressed, how the poor can be protected and emancipated. If this process is carried out properly, the inclusive community agenda as stipulated in the SDGs has a great potential for success.

5.5 Recommendations for future research

It is important to note that this study is limited in scope so the following recommendations in terms of future studies could be implemented:

- Similar studies may be done in other cities or expanded to look at a province or the country.
- A study focusing on other socio-economic services and infrastructure like transportation in creating inclusive communities or technology (smart city) could be done.
- A study to determine how a certain development approach/concept can create inclusive communities, e.g. regional development, nodal development, or transport-oriented development.

BIBLIOGRAPHY

City of Johannesburg, 2018. *City of Johannesburg IDP 2018/19 Review*, Joburg: City of Johannesburg.

Abrahams, D., 2018. Chapter 7: Local economic development in South Africa: A useful tool for sustainable development. In *Local Economic Development in the Changing World*. In: *In Local Economic Development in the Developing World*. s.l.:Routledge, pp. 131-145.

Alves, G., 2016. *Slum Growth in Brazilian Cities*. [Online]

Available at: <https://ideas.repec.org/p/dbl/dblwop/958.html>

[Accessed 16 3 2019].

Anon., . *421a and J-51 Housing FAQ: Tax Abatement and Exemption Programs*. [Online]

Available at: <http://www.nycrgb.org/html/resources/faq/421a-J51.html>

[Accessed 18 12 2019].

Anon., . *GAUTENG HOUSING DEVELOPMENT rental housing development AFFORDABLE HOUSING*. [Online]

Available at: <http://www.gpf.org.za/Projects-Funded>

[Accessed 14 3 2019].

Anon., . *Reforming NYC's 421-a Property Tax Exemption Program*. [Online]

Available at: <http://www.prattcenter.net/projects/sustainable-community-development/reforming-nycs-421-property-tax-exemption-program>

[Accessed 18 12 2019].

Anon., . *Tax Incentives: 421a*. [Online]

Available at: <https://www1.nyc.gov/site/hpd/developers/tax-incentives-421a-main.page>

[Accessed 18 12 2019].

Anyanwu, J. C., 2014. *Determining the Correlates of Poverty for Inclusive Growth in Africa*. [Online]

Available at: <https://ideas.repec.org/a/ris/eueclt/0021.html>

[Accessed 13 5 2019].

Arpey, C., 2017. The multifaceted manifestation of the poor doors: examining forms of separation in inclusionary housing. *American University Business Law Review*, 6(3), pp. 627-645.

Arthurson, K., 2002. Creating Inclusive Communities through Balancing Social Mix: A Critical Relationship or Tenuous Link?. *Urban Policy and Research*, , 20(3), pp. 245-261.

Arthurson, K., 2002. Creating Inclusive Communities through Balancing Social Mix: Acritical relationship or tenuous Link. *Urban Policy and Research*, Volume 3, pp. 245-261.

Arthurson, K., 2004. From stigma to demolition: Australian debates about housing and social exclusion. *Journal of Housing and the Built Environment*, Volume 19, pp. 255-270.

Baloyi, V., 2019. *ROUND 2 QUESTIONS The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa.*, Johannesburg: Survey Monkey.

Baloyi, V., 2019. *The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of The Fleurhof Development in Johannesburg, South Africa.*, Johannesburg: Survey Monkey.

Barros, C. P. & Gupta, R., 2017. Development, poverty and inequality: A spatial analysis of South African Provinces. *Journal of Developing Areas*, 15(1), pp. 19-32.

Becker, P. E., 1998. Making Inclusive Communities: Congregations and the "Problem" of Race. *Social Problems*, , 45(4), pp. 451-472.

Björkman, L., 2013. Cities With 'Slums': From Informal Settlement Eradication to a Right to the City in Africa by Marie Huchzermeyer. *Journal of Urban Affairs*, , 35(1), pp. 124-126.

Brenzel, K. & Parker, W., . *It's back: Lawmakers revive 421a as Affordable NY*. [Online] Available at: <https://therealdeal.com/2017/04/09/its-back-lawmakers-revive-421a-as-affordable-ny/> [Accessed 18 12 2019].

Brundland, G. H., 1987. *Brundland Commission Report: Our Common Future*, Oslo: Oxford University Press.

Buczowska, S. & de Lapparent, M., 2014. Location choices of newly created establishment: Spatial patterns at the aggregate level. *Regional Science and Urban Economics*, Volume 48, pp. 68-81.

Calavita, N. & Grimes, K., 1998. Inclusionary Housing in California: The Experience of Two Decades. *Journal of The American Planning Association*, , 64(2), pp. 150-169.

Calavita, N., Grimes, K. & Mallach, A., 1997. Inclusionary housing in California and New Jersey: A comparative analysis. *Housing Policy Debate*, , 8(1), pp. 109-142.

Calgro m3 Group, 2016. *Calgro m3 Group*. [Online]
Available at: www.calgrom3.com/index.php/fleurhof
[Accessed 18 February 2019].

Calgro m3 Group, 2019. *Developments: Calgro m3*. [Online]
Available at: <https://www.nowsellingcalgrom3.com/developments/gauteng/south-hills>
[Accessed 25 September 2019].

Carson, S. S., 2010. Outcomes research: methods and implications.. *Seminars in Respiratory and Critical Care Medicine*, , 31(01), pp. 003-012.

Chambers, R., 2006. *What is poverty: concepts and measures*. Sussex, United Nations.

Chambers, R., 2007. Participation and Poverty. *Development*, 50(2), pp. 20-25.

Chichetti, J., 2011. A two-round Delphi study examining consensus of recommended clinical practices for patients with ventricular assist devices as destination therapy. *Prog Transplant*, 21(1), pp. 15-26.

City of Johannesburg , 2019. *Joburg 2040 Growth and Development Strategy (GDS): 'A strategy for progressive change'*, City of Johannesburg: City of Johannesburg.

Cochran, W. G., 1977. *Sampling Techniques* (. 3rd ed. New York: Wiley & sons.

Crisp, J. et al., 1997. The Delphi Method?. *Nursing Research*, Volume 46, pp. 116-118.

Democratic Alliance , 2019. www.da.org.za. [Online]
Available at: <https://www.da.org.za/government/undefined/2019/03/city-delivers-smiles-and-rdp-homes-in-diepsloot>
[Accessed 10 September 2019].

Droste, C., 2015 . German co-housing: an opportunity for municipalities to foster socially inclusive urban development. *Urban Research 7 Practice*, 8(1), pp. 79-92.

Flick, U., 2004. Triangulation in qualitative research. . In: U. Flick, E. von Kardoff & I. Steinke, eds. *A companion to qualitative research*. London: Sage Publications, pp. 178-183.

Fosu, A. K., 2015. Growth, inequality and poverty in Sub-Saharan Africa: Recent progress in a global context. *Oxford Development Studies*, 43(1), pp. 44-59.

- Gill, F., Leslie, G., Grech, C. & Latour, J., 2013. Using a web-based survey tool to undertake a Delphi study: Application for nurse education research. *Nurse Education Today*, 33(11), pp. 1322-1328.
- Goebel, A., 2007. Sustainable urban Development? Low-cost housing challenges in South Africa. *Habitat International*, 31(3-4), pp. 291-302.
- Goebel, A., 2007. Sustainable urban development? Low-cost housing challenges in South Africa. *Habitat International*, , 31(31), pp. 291-302.
- Green, B., Jones, M., Hughes, D. & Willimas, A., 1999. Applying the Delphi technique in a study of GP's information requirements. *Health and Social Care in the Community*, 7(3), pp. 198-205.
- Grobbelaar, S. S., 2007. *Chapter 6 - Data Gathering: Delphi Method*, Pretoria: University of Pretoria.
- Gupta, J., Pouw, N. & Ros-Tonen, M., 2015. Towards an elaborated theory of inclusive development. *European Journal of Development Research*, Volume 27, pp. 541-559.
- Gupta, J. & Vegelin, C., 2015. Sustainable development goals and inclusive development. *Int Environ Agreements*.
- Haferburg, C., 2013. Townships of to-morrow? Cosmo City and inclusive visions for post-apartheid urban futures.. *Habitat International*, Volume 39, pp. 261-268.
- Hammer, J., . A Look Into Brazil's Makeover of Rio's Slums | People *Smithsonian*, , 43(9), p. 44-53.
- Hassan, F., Keeney, S. & McKenna, H., 2000. Research guidelines for the Delphi survey technique. *Journal of Advanced Nursing*, 32(4), pp. 1008-1015.
- Haughton, G., 1999. Environmental justice and the sustainable city. *Journal for Planning Education and Research*, Volume 18, pp. 233-243.
- Haughton, G., 1999. Environmental Justice and the Sustainable City. *Journal of Planning Education and Research*, 18(3), pp. 233-243.
- Heyns, C. & Brand, D., 1998. Introduction to socio-economic rights in the South African Constitution.. *Law, Democracy & Development*, 2(2), pp. 153-167.
- Hoossein, S. T. R. et al., 2016. Disaster Management Policy Options to Address the Sanitation Challenges in South Africa.. *Journal of environmental health*,, 78(7).

Hsu, C.-C. & Sandford, B., 2007. The Delphi Technique: Making Sense of Consensus. *Practical Assessment, Research & Evaluation*, 12(10), pp. 1-5.

Hsu, C.-C. & Sandford, B. A., 2007. The Delphi Technique: Manking Sense of Consensus. *Practical Assessment Research and Evaluation*, 12(10), pp. 1-8.

Ibimilua, A. F., 2011. The Nigerian National Housing Policy in Perspective: A Critical Analysis. *Journal of Social Development in Africa*, , 26(2), pp. 165-188.

Jantzen & Ann, E., 1998. Book Reviews: Resources for Creating Inclusive Communities. *Electronic Journal for Inclusive Education*, , 1(1), p. 5.

Jewell, N., 2016. *Inhabitat*. [Online]

Available at: <https://inhabitat.com/poor-door-just-the-beginning-of-disparate-living-conditions-at-50-riverside-say-lower-income-residents/>

[Accessed 18 December 2019].

John, B., 2008. *Succeeding with your Master's Dissertation: A step-by-step handbook*. New York: Open University Press.

Joshco, 2019. *About Us: Johannesburg Socila Housing Company*. [Online]

Available at: <http://www.joshco.co.za/About.html>

[Accessed 06 November 2019].

Karriem, A. & Hoskins, M., 2016. From the RDP to the NDP: A critical appraisal of the developmental state, land reform, and rural development in South Africa.. *Politikon*, 43(3), pp. 325-343.

Kendall, E. K. & Kendal, E. J., 2010. *Systems analysis and design*. 8th ed. s.l.:Pearson.

Khan, M. M., 2014. *Creating Sustainable Human Settlements using Integrated Housing Developments on infill Sites: A Case Study of Fleurhof, Johannesburg*. [Online]

Available at: <http://wiredspace.wits.ac.za/handle/10539/20468>

[Accessed 14 3 2019].

Kirkland, A., . 'Poor Doors' Are Only the Tip of the Affordable Housing Iceberg. [Online]

Available at: <https://www.alternet.org/2014/08/poor-doors-are-only-tip-affordable-housing-iceberg/>

[Accessed 18 12 2019].

Knopjes, B., 2015. Jozi-A journey of change: municipal focus. *IMIESA*, 40(2), pp. 10-13.

Konopko, D. A., 2016. Targeting Tax Dollars More Efficiently: Proposed Modifications to the 421-a Real Property Tax Exemption. *Fordham Urban Law Journal*, 15(4), p. 1075–1099.

Leedy, P. D. & Ormrod, J. E., 2014. *Practical Research, Planning and Design*. 10th ed. Harlow: Pearson Education Limited.

Levenson, Z., 2012. Cities with 'Slums': from informal settlement eradication to a right to the city in Africa (review). *Transformation: Critical Perspectives on Southern Africa*, , 78(1), pp. 133-143.

Loughlin, K. & Moore, L., 1979. Using Delphi to achieve congruent objectives and activities in a pediatrics department. *Journal of Medical Education*, Volume 54, pp. 101-106.

Lustig, N., 2016. Redistribution in middle income countries: Brazil, Chile, Colombia, Indonesia, Mexico, Peru & Sout Africa. *Journal of globalozation and development* , 7(1), pp. 17-60.

MacDonald, S. & Headlan, N., 2011. *Research Methods Handbook: Introductory guide to research methods for social research*. Manchester: CLES Express Network.

MacDonald, S. & Headlan, N., n.d. *Research Methods Handbook: Introductory guide to research methods for social research*. Manchester: CLES Express Network.

Mackay, C. J., 1999. POLICY REVIEW Housing Policy in South Africa: The Challenge of Delivery. *Housing Studies*, , 14(3), pp. 387-399.

Maliene, V., Howe, J. & Malys, N., 2008. Sustainable Communities: Affordable Housing and Socio-economic Relations. *Local Economy*, , 23(4), pp. 267-276.

Manomano, T. & Tanga, P., 2018. Housing needs: The quality and quantity of housing provided by the government for the poor in the eastern Cape province in South Africa.. *Social Work*, 54(1), pp. 19-36.

Manomano, T., Tanga, T. & Perpetua, T., 2016. Housing problems and programs in South Africa: A literature review. *J Sociology Soc Anth*, 7(2), pp. 111-117.

Marais, L. & Ntema, J., 2013. The upgrading of an informal settlement in South Africa: Two decades onwards. *Habitat International*, , 39(), pp. 85-95.

Marais, L. et al., 2016. Reinforcing housing assents in the wrong location? The case of Botshabelo, South Africa. *Urban Forum*, Volume 27, pp. 347-362.

Mohlakoana, N., de Groot, J., Knox & A.J, 2017. Chapter 5: Post-apartheid spatial inequalities and the built environment: Drivers of energy vulnerability for the urban poor in South Africa.. In: N.

Simcock, H. Thomson, S. Petrova & S. Bouzarovski, eds. *Energy Poverty and Vulnerability: A Global Perspective*. s.l.:Routledge, pp. 61-79.

Morange, M., 2002. Backyard shacks: The relative success of this housing option in Port Elizabeth. *Urban Forum*, 13(2), pp. 3-25.

Mudau, N. M. G. M. P. a. S. M., 2019. Towards a Smart Metropolitan Regional Development—Spatial and Economic Design Strategies: Johannesburg. In Smart Metropolitan Regional Development . In: *Smart Metropolitan Regional Development*. Singapore: Springer, pp. 919-976.

Murie, A., 2018. Shrinking the state in housing: challenges, transitions and ambiguities. *Cambridge Journal of Regions, Economy and Society*, Volume 11, pp. 485-501.

Murray, C. J., 2014. Promoting 'Inclusive Communities': A Modified Approach to Disparate Impact Under the Fair Housing Act. *Louisiana Law Review*, , 75(1), p. 11.

Neuman, W. L., 2014. *Basics of Social Research: Qualitative & Quantitative Approaches*. 3rd ed. Harlow: Pearson Education Limited.

Newton, C. & Schuermans, N., 2013. More than twenty years after the repeal of the Group Areas Act: housing , spatial planning and urban development in post-apartheid South Africa. *J Hons and the Built Environ*, Volume 28, pp. 579-587.

Newton, C. & Schuermans, N., 2013. More than twenty years ater the repeal of the Group Areas Act: housing, spatial planning and urban development in post-apartheid South Africa. *Journal of Housing and the Built Environment*, Volume 28, pp. 579-587.

Norberg, J. & Cumming, G., 2008. *Complexity theory for a sustainable future*. New York: Columbia University Press.

Norberg, J. & Cumming, G., 2008. *Complexity theory for a sustainable future*. New York: Columbia University Press.

Nworie, J., 2011. Using the Delphi Technique in Educational Technology Research. *TechTrends*, 55(5), pp. 24-30.

Onatu, G., 2010. Mixed-income housing development strategy: perspective on Cosmo City, Johannesburg, South Africa.. *International Journal of Housing Markets and Analysis*, 3(3), pp. 203-215.

Pacione, M., 2009. *Urban Georgraphy: Aglobal perspective*. 3rd ed. New York: Routledge.

Patel, K., 2015. J. Bredenoord, P. van Lindert and P. Smets (2014) (eds): Affordable housing in the urban global south—seeking sustainable solutions. *Journal of Housing and The Built Environment*, , 30(4), pp. 711-713.

Pfeiffer, D., 2012. Passing a Mandatory Inclusionary Housing Ordinance: Lessons from San Francisco and San Diego. *Berkeley Planning Journal*, , 20(1), pp. 77-95.

Pieterse, E. & Owens, K., 2018. Johannesburg: Confronting Spatial Inequality.. *World Resource Report*, December, pp. 1-28.

Ploeg, J., 1999. Identifying the best research design to fit the question. Part 2: qualitative designs. *Evidence-Based Nursing*, , 2(2), pp. 36-37.

Pouw, N. & Bruijne, A. d., 2015. Strategic Governance for Inclusive Development. *The European Journal of Development Research*, , 27(4), pp. 481-487.

Ren, X., 2018. Governing the Informal: Housing Policies Over Informal Settlements in China, India, and Brazil. *Housing Policy Debate*, , 28(1), pp. 79-93.

Republic of South Africa, 2014. *GCIS Documents - MTSF 2014-19: Republic of South Africa*. [Online]

Available at: https://www.gov.za/sites/default/files/gcis_document/201409/mtsf2014-2019.pdf [Accessed 25 January 2020].

Residents, 2019b. *Do you effectively participate in development in the area* [Interview] (22 September 2019b).

Residents, 2019. *What are the opportunities available in and around the developments* [Interview] (22 September 2019).

Rosenberger, I. K., 2009. *SUSTAINABLE LOW-COST HOUSING - A REVIEW OF THREE LOW-COST HOUSING DEVELOPMENTS IN GAUTENG PROVINCE*. [Online]

Available at:

https://ujdigispace.uj.ac.za/bitstream/handle/10210/2029/rosenberger_dissertation.pdf?sequence=1

[Accessed 18 6 2019].

Sachs, I., 2004. *Inclusive Development strategy in an era of globalisation: International Labour Office working paper*, Geneva: International Law Organisation.

Sarma, R., 2012. RESEARCH: IN A METHODOLOGICAL FRAME. *Researchers World*, , 3(3), p. 100.

Schwartz, S. I. & Johnston, R. A., 1983. Inclusionary Housing Programs. *Journal of The American Planning Association*, , 49(1), pp. 3-21.

Seagle, E. & Iverson, M., 2002. Characteristics of the turfgrass industry in 2020: a Delphi study with implications for agricultural education programs. *Journal of Southern Agricultural Research*, 52(1), pp. 1-13.

Sibanda, A., 2017. *Mixed-income housing developments as a social and spatial integration strategy: the case of Fleurhof integrated residential development.*, Johannesburg: Wiredspace Wits.

Siggelkow, N., 2007. Persuasion with case studies.. *Academy of management journal*, 50(1), pp. 20-24.

Simon, D., 1989. Colonial cities, postcolonial Africa and the world economy: a reinterpretation.. *International Journal of Urban and Regional Research*, , 13(1), pp. 68-91.

Skulmoski, G. J., Hartman, F. & Krahn, J., 2007. The Delphi Method for Graduate Research. *Journal of Information Technology Education*, , 6(1), pp. 1-21.

Sliuzas, R., 2003. Opportunities for enhancing communication in settlement upgrading with geographic information technology - based support tools. *Habitat International*, , 27(4), pp. 613-628.

Snedecor, G. W., 1956. *Statistical methods : applied to experiments in agriculture and biology / by George W. Snedecor, William G. Cochram.* [Online]

Available at: <http://library.um.ac.id/free-contents/index.php/buku/detail/statistical-methods-applied-to-experiments-in-agriculture-and-biology-by-george-w-snedecor-william-g-cochram-10104.html>

[Accessed 14 10 2019].

Sorkin, M., . *What's Behind the 'Poor Door'?*. [Online]

Available at: <https://www.thenation.com/article/whats-behind-poor-door/>

[Accessed 18 12 2019].

Stake, R. E., 2005. Qualitative Case Studies. In: N. K. Denzin & Y. Lincoln, eds. *The Sage handbook of qualitative research* . s.l.:Sage Publications Ltd, pp. 443-466.

- Stake, R. E., 2008. Qualitative case studies. In: N. Denzin & Y. Lincoln, eds. *Strategies of qualitative inquiry*. s.l.:Sage Publications, Inc., pp. 119-149.
- Thorne, S., 2000. Data analysis in qualitative research. *Evidence-Based Nursing*, , 3(3), pp. 68-70.
- Tomlinson, M. 2., 2011. Managing the risk in housing delivery: Local government in South Africa.. *Habitat International*, , 35(3), pp. 419-425.
- Tsang, E., 2014. Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16(4), pp. 369-383.
- Tumusiime, E. & Matotay, E., 2014. Agriculture Sustainability, Inclusive Growth, and Development Assistance: Insights from Tanzania. *Journal of Sustainable Development*, , 7(4), p. 181.
- Turner, J. F. C., 1972. Chapter 7: Housing as a verb. In: C. Macmillan, ed. *Freedom to build, dweller control of the housing process*. New York: s.n., pp. 148-173.
- Turok, I. & Borel-Saladin, J., 2016. Backyard Shacks, informality and the urban housing crisis in South Africa: Stopgap or prototype solution. *Housing Studies*, 31(4), pp. 384-409.
- Urban Dyamics, 2009. *News: Urban Dynamics*. [Online]
Available at: <https://www.urbandynamics.co.za/news/31-cosmo-city-an-integrated-housing-project.html>
[Accessed 25 November 2019].
- Varela, C. et al., 2016. 2017. Advantages and Disadvantages of using the website SurveyMonkey in a real study: Psychopathological profile in people with normal-weight, overweight and obesity in a community samp. *The International Scientific Journal*, Volume 3, pp. 77-90.
- Vita, G. E. D. & Oppido, S., 2016. Inclusive Cities for Intercultural Communities. European Experiences. *Procedia - Social and Behavioral Sciences*, , 223(), pp. 134-140.
- Von der Grant, H., 2008. The Delphi Technique for Future Research. In: *The Future of Logistics: Scenarios for 2025*. Wiesbaden: Springer Science & Business Media, pp. 21-64.
- Wilkinson, P., 1998. Housing policy in South Africa. *Habitat International*, 22(3), pp. 215-229.
- Wilkison, P., 1998. Housing Policy in South Africa. *Habitat International*, 22(3), pp. 215-229.
- World Bank, 2018. *Overcoming poverty and inequality in South Africa: An assessment of drivers, constraints and opportunities*, Pretoria: World Bank.

Yin, R., 2013. Validity and generalization in future case study evaluations. *Evaluation*, 19(3), pp. 321-332.

Yousuf, M., 2007. Using experts opinions through Delphi technique.. *Practical assessment, research, and evaluation*, 12(4), pp. 1-8.

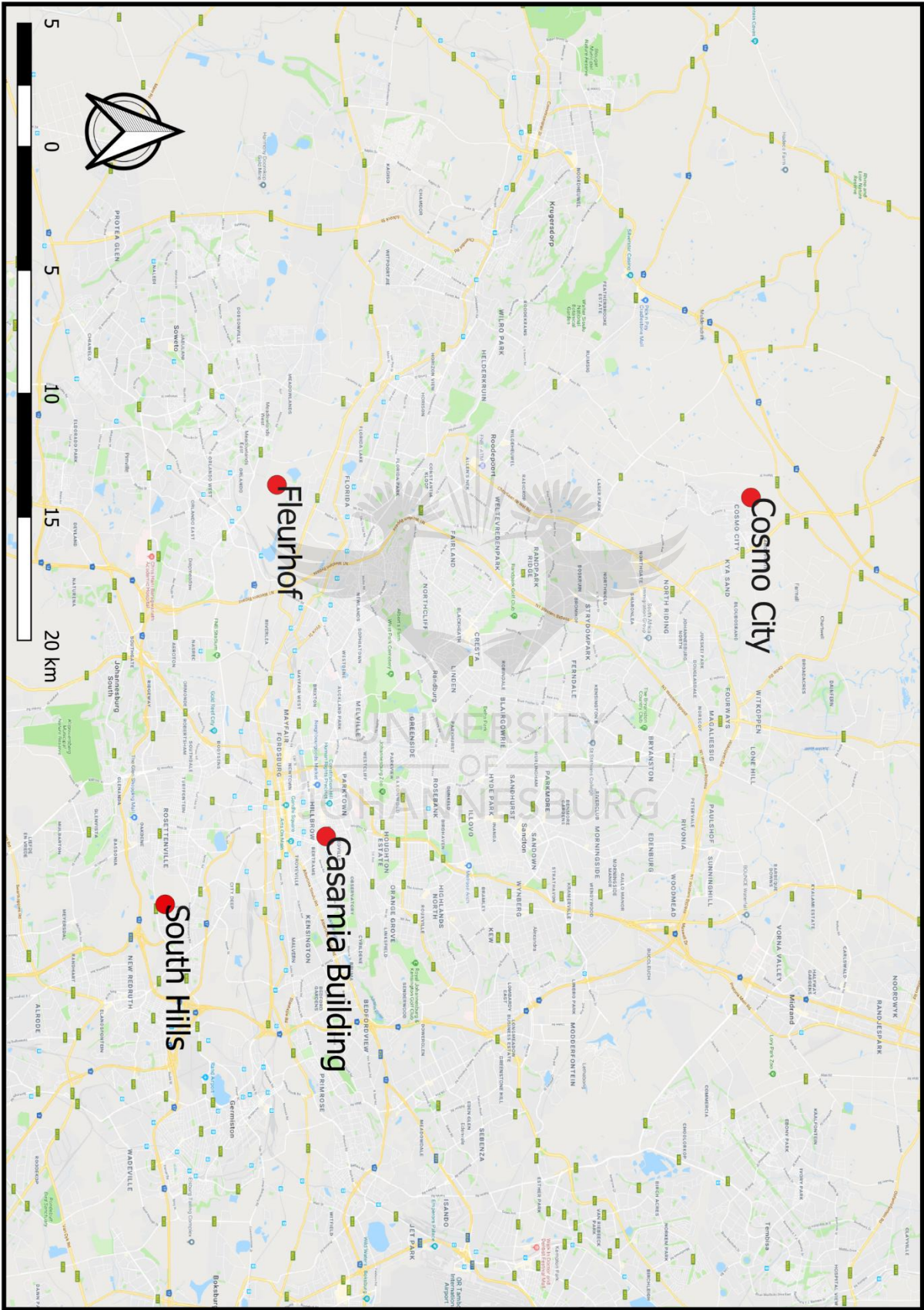
Ziblim, A. S. M. a. C. A., 2013. The dynamics of informal settlements upgrading in South Africa.. *Habitat International.*, Volume 37, pp. 316-334.



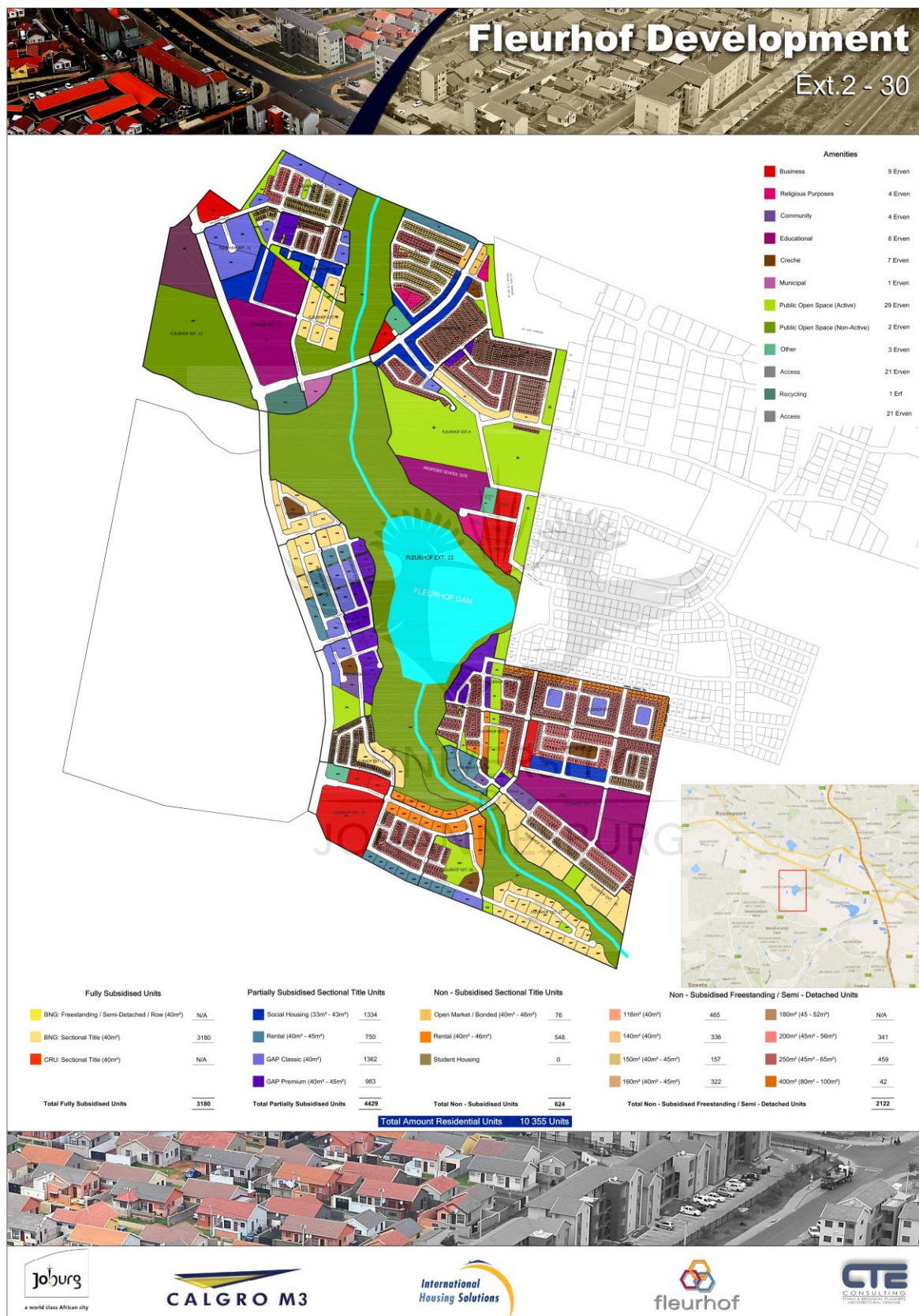
ANNEXURES



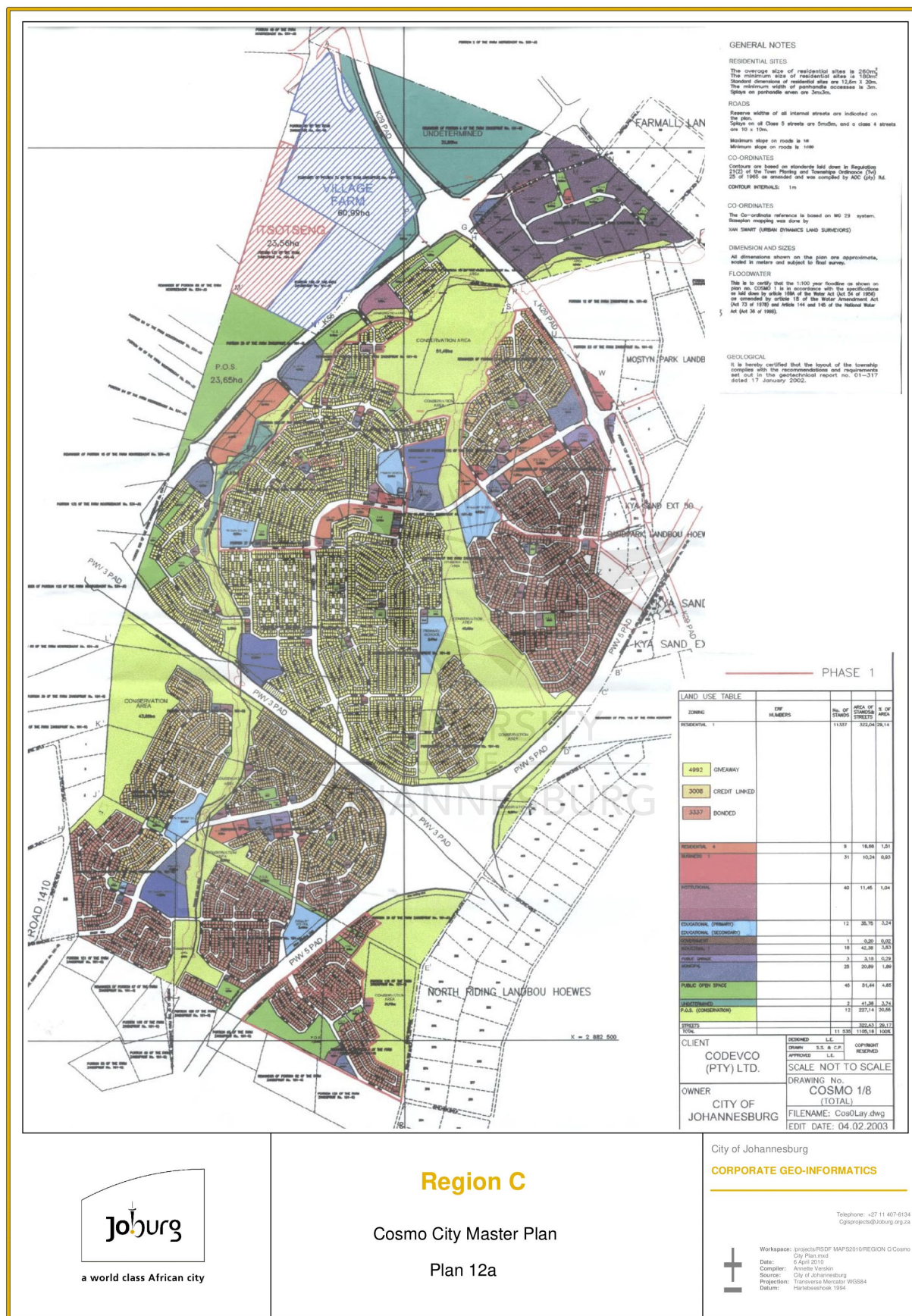
Annexure 1: Locality Plan



Annexure 2: Fleurhof Layout Plan



Annexure 3: Cosmo City Layout Plan

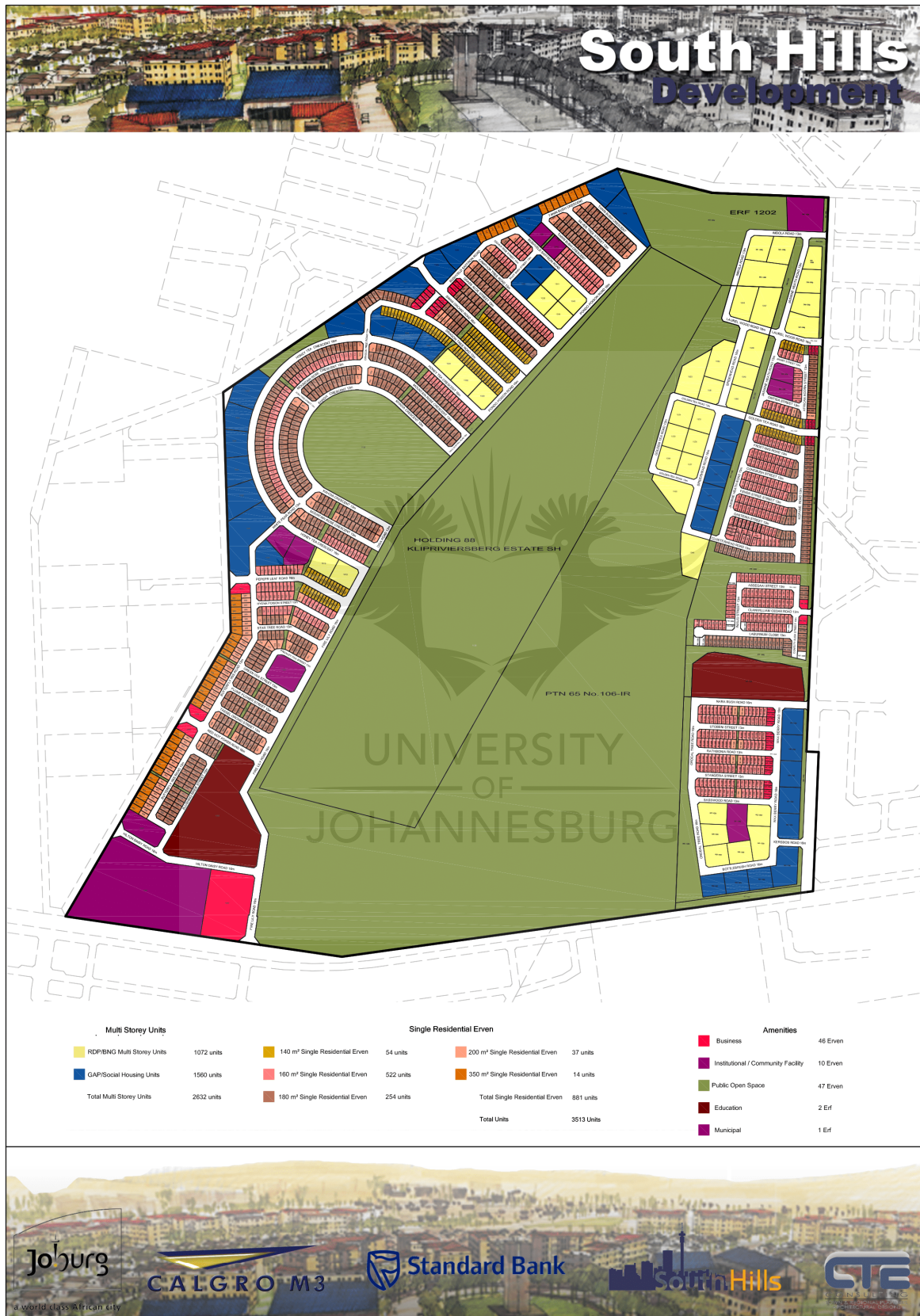


Region C

Cosmo City Master Plan

Plan 12a

Annexure 4: South Hills Layout Plan



Annexure 6: Survey Monkey Questionnaire

First Round Survey: <https://www.surveymonkey.com/r/PJYPJ7F>

Second Round Survey: <https://www.surveymonkey.com/r/P9C8BG2>



Annexure 5: Resident Questionnaire

CONSENT FORM

RESPONDENT NUMBER:

University of Johannesburg

Department of Town & Regional Planning

Master of Sustainable Urban Planning and Development (MUSPD)

Researcher: Vutivi Baloyi (217073098)

Supervisor: Mr G. Onatu

Topic: The Role of Low-Middle Income Housing in Creating Socially and Economically Inclusive Communities: A Study of Johannesburg, South Africa.

The purpose of this research is to establish the role that housing plays in creating an environment where socio-economic opportunities are shared, and understanding what the norms and standards are, the principles that direct low-middle income housing and community development. The researcher further wants to establish how the current theoretical and practical strategy and approach in low-and middle-income housing policy and development address poverty and inequality and how stakeholders participate in housing policy and development in the City of Johannesburg.

Consent to Take Part in Research

1. I voluntarily agree to participate in this research study.
2. I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
3. I understand that I can withdraw permission to use data from my interview within two weeks after the interview, in which case the material will be deleted.
4. I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
5. I understand that I will not benefit directly from participating in this research.
6. I agree to my interview being audio-recorded.
7. I understand that all information I provide for this study will be treated confidentially.
8. I understand that disguised extracts from my interview may be quoted in research seminar.
9. I understand that if I inform the researcher that myself or someone else is at risk of harm, they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.

10. I understand that signed consent forms, transcripts and original audio recordings will be retained by the researcher for period deemed necessary.

11. I understand that I am free to contact any of the people involved in the research to seek further clarification and information (contact details as set out above).

YES / NO

I hereby give consent

Date

Signature of researcher

Date

Question 1: Opportunities

The question of opportunity is broken down into more specific questions:

Do you have reasonable access to social facilities and amenities (education, health, safety and security, recreation)?

YES	NO
Elaborate/Explain:	

Do you have access to economic opportunities (something that can make you a leaving including infrastructure and transportation)?

YES	NO
Elaborate/Explain:	

Question 2: Effective Participation

The question of effective participation is broken down into more specific questions:

Do you participate in development in the area?

YES	NO
Elaborate/Explain:	

Do you feel your views are valued during public participation meetings?

YES	NO
Elaborate/Explain:	

Annexure 7: Spatial analysis Maps

